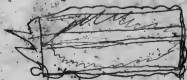


Vermillion Township

Farmers Club

1871 — 1873

Transcribed by M. W. Anthony



Harvard Club of Cambridge

Article VIII

the constitution and By-laws may be amended at any regular meeting of the Club by the consent of a majority of the members present.

Article VIII

And there shall be elected annually a Treasurer whose duty it shall be to keep and disburse the funds of the Society upon order of the Secretary.

The noblest work of genius in the English language is the Paradise Lost. This sublime poem, which can not

be the feelings of the poet
and not in the heart
of the reader, was the produc-
tion of John Milton, Latin Secretary, of
the Council, who married the daughter
of a merchant. The
first edition
of the poem
was published
in 1667.

By-Laws of The Harmonic Club of Article 1

The meetings of this club shall be held on Tuesday
evening of every week in winter opening at 7 1/2 past 12
P.M. and closed The first Saturday evening of each winter
in summer opening at 7 P.M.

Article II
The order of exercises of this club shall consist
of a lecture by some member of the club designated
by the President in alphabetical order from the roll
of members or by any other person who shall be at the
meeting previous upon some subject relating to legisla-
tion or historical time. After which any member may
be allowed to speak upon it provided he speaks but three
and not longer than five minutes at a time.

After the subject of the evening
any member may read poetry
orations or recitations of
be given as briefly as

In testimony whereof

At 2300
RECEIVED N

W

W

No. of students		Name		Amount	
1	✓	1	1	1	1
2		2	2	2	2
3		3	3	3	3
4		4	4	4	4
5		5	5	5	5
6		6	6	6	6
7		7	7	7	7
8		8	8	8	8
9		9	9	9	9
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31		31	31	31	31
32		32	32	32	32
33		33	33	33	33
34		34	34	34	34
35		35	35	35	35
36		36	36	36	36

Proc. of the Friends School Feb 7 1871

According to a notice publicly given a portion of the
citizens of Hamilton Township met at South Hall
for the purpose of organizing a fair and club.
This object was achieved to a suitable and interesting
and pertinent to the occasion after which others
expressed themselves in favor of the movement.
A committee of three persons having been appointed
to prepare a constitution and by-laws and procure
a hall room reported that the hall over South Store
could be obtained for the purpose and also reported
a constitution and by-laws which after being read
and by article were adopted with but few alterations.
Officers were then voted for under
the constitution with the following result viz.
President George Scott
Secretary H. H. Thompson. The Rev. J. H. Schenkert being
called to lecture on the next evening of the meeting
the club on motion the club adjourned to meet at
the regular meeting.

J. H. Schenkert

Prec

W. H. Thompson

Sec.

Minutes of the Executive Club Feb 21/71

The Club met pursuant to adjournment the President in the chair. The minutes of the last meeting were read and approved by the club. Fore-noon being the subject of the evening. A notice upon it by H. H. Somers was read to the attendance, after which the members enjoyed a brief session of adjournment and instruction in relation to their experience. Each expressing their opinions upon the topic, some being opposed to accepting were condemned into the disciples of Longwood.

On motion the resolution introduced at the last far consideration on this evening was laid on.

Three persons joined the Club this evening raising the membership to twenty.

The House was again upon the subject of the next evening and H. H. Somers was appointed to introduce them.

On motion the club adjourned.

J. J. Schmitt
President

H. H. Somers
Sec.

Well of the Lamer Plant Feb 28 1871

The following was read to and approved the
Committee in the chair. The minutes of the last
meeting being read and approved the report of
the standing Committee was introduced by the
Chairman. The interesting general description followed
in which it appeared that there was much unanimity
on the point of saving horses but considerable
difference of opinion as to the kind of farms ought
to raise.

So. Library matter, going to New York introduced and caused that a committee of three persons be appointed a committee to take into consideration the propriety and expediency of the matter and to report to the club at some future time

It being the evening for the election of officers the following persons were elected to the respective offices, viz: President James Sprague pres. Dan D. Knapp Secy. Wm. Alexander Nelson.

Dr. H. B. Royce was appointed to lecture on the next evening the subject being "Dramas and their interests".

On motion the bill is passed.

H. Schubert



1946

What to expect my children
He is universal love
He will be with us
He is always for the world

see copy in Service Club Room

in that we were present to adjournment
was incident at the chain the minutes
of the last meeting were read and approved
by the club. In the absence of Mr. G. H. Wright
Mr. W. A. C. was chosen to read the minutes
of the last meeting and then introduced
the subject of an interesting and useful
discussion on the different kinds of grasses
which grow in the State and the possibilities
of making them for pasture. Mr. W. A. C.
read a paper on the subject of the different
kinds of grasses which grow in the State
and the possibilities of making them for
pasture. The subject was very interesting
and was well received by the club. The
club was adjourned upon the subject of
the different kinds of grasses which grow
in the State and the possibilities of making
them for pasture.

Advised

1000

100

2. *Hydrobia ulana*

Meeting of the Farmers Club March 17th 1891

The Club met pursuant to adjournment called to order by the Pres. Hunt. The Secretary being absent J. H. Ashburn was chosen Secretary. Call on the members of the previous meeting unanimous and approved.

Mr Thomas Bushnell entertained the Club for some time with a very interesting lecture upon the Science of Food. After dinner the members of the Club spent some time in remarks upon the different topics set forth by Mr Bushnell.

Mr Wm Boyd was appointed by the President to deliver at the next meeting of the Club's subject, Fertilizers.

The Club on motion adjourned to meet on next Monday evening.

J. H. Ashburn Secy

Stacy L. Smith, California

I have received your letter of the 10th inst. and am
glad to hear from you. I am well at present.
I have been thinking much lately about the future
of our country and the people who live in it.

[illegible]

C. B. I. *Chap*
 I. B. I. *Chap*

Let's see how it is.

The Court must preserve the enjoyment of
the incident in the share, but not the right to
the land. The Court then turned to the other
subject, the duty of the plaintiff to pay for the
work done. The Court said that a person who
has a right to the land, but who does not
exercise it, is not liable for the work done.
The Court then turned to the question of
the duty of the plaintiff to pay for the work
done. The Court said that a person who
has a right to the land, but who does not
exercise it, is not liable for the work done.

The Court then turned to the question of
the duty of the plaintiff to pay for the work
done. The Court said that a person who
has a right to the land, but who does not
exercise it, is not liable for the work done.
The Court then turned to the question of
the duty of the plaintiff to pay for the work
done. The Court said that a person who
has a right to the land, but who does not
exercise it, is not liable for the work done.

The Court then turned to the question of
the duty of the plaintiff to pay for the work
done. The Court said that a person who
has a right to the land, but who does not
exercise it, is not liable for the work done.
The Court then turned to the question of
the duty of the plaintiff to pay for the work
done. The Court said that a person who
has a right to the land, but who does not
exercise it, is not liable for the work done.

Hall of Farmers Club April 20th 1871

Club met and was organized by the President & Fort
 Esays in the chair the Secretary read the minutes of the
 last meeting and upon motion of approval Mr. Schenck
 thought they were deficient in not reporting the elegant and
 instructive remarks of the retiring Secretary but was
 willing to attribute it to the native modesty and youthful
 timidity of the gentleman the motion of approval was
 sustained - Mr. Samuel Ewing appointed at the last
 meeting to make the address of the evening failing
 to make his appearance the President called upon
 Mr. A. Nelson for remarks upon sowing oats
 and planting corn. He began by saying that his experience
 was not different with oat crop in this state but he had
 found that his new-found experience will not answer here
 but while in Vermont you might sow from 15th of April to 15th
 May and have a good crop while here it is necessary that you
 sow as early as the ground can be got in order even as early
 as March believes that oats lower here after middle of
 April a doubtful experiment he grew last year a large
 kind of white oats (shows no name for them they stand
 out at least one third more than the common oat -
 corn should be planted late enough to be past the season
 of Frost, the best corn he ever raised was planted the
 first of June has always grown the yellow corn with
 the exception of one year believes that white corn will not
 fatten stock equal to the yellow the true quality being rare

Mr. Stott believes that oats and corn will become acclimated
 and that in a moist and climate oats will be much heavier &
 productive than when grown with us for a series of years
 and that in his opinion all that goes the Norway
 their nobility and prestige was there being first
 cultivated in Vermont where the climate is suitable
 for the oat crop - and not only will, but they have
 already degenerated and run out with us, if of
 opinion that is a mechanical error and

and fallow to sow oats with the soil in the Mud State in order to get them in early. When the oat crop is often exposed by the frost soon about the time of falling. Thinks the Norway Oats only suitable for a very rich soil is in favor of furrowing deep for corn within two inches as deep as the ground was plowed his experience is in favor of yellow corn.

Mr. Hot Glen does not esteem himself a big hand of an oat farmer thinks about the middle of April the proper time for sowing - has Black and white Oats mixed gets a better crop than he ever did with either singly - estimates the 10th to 20th May as the proper time for planting corn - does not know why it is he has never planted yellow corn yet. But when he came to harvest it he used having done so - last year in some field had $\frac{1}{2}$ more white to the acre than of yellow the quality of soil was in favor of the yellow - a previous year he had in some field 45 bu. of white 80 of common yellow 4.50 of Virginia all with same culture -

Mr. Jos. Boyl believes the best time for sowing oats to be from the 15th of April to the first of May but at present time until the soil is in a state suitable for plowing without their being a probability of its baking - Thinks it best to lay a few days after plowing before sowing in order to surface dry. That then harrowing will more effectually pulverize and mellow the soil - Believes the ordinary small white Oats to be the most reliable - Cultivated 5 acres of Norway last year had 200 bushels is not dissatisfied with them but will try them again in the raising of corn thinks it all important to have the soil in good condition before planting is in favor of deep harrowing an advocate of yellow corn while does not when early enough.

The Brunswick says that farmers are not
 contributors for all the Humbugs of the day
 Query by his box the Dr not got more Glycerine to spare
 than several ordinary mortals and when humbugs next
 come round would it not be advisable to apply the
 Cauldron & Pressure to him) And parties that may have
 been green enough to have invested in \$100 Norway
 oats are too reluctant to be without a fence around
 them. Early brown oats have always done but with him
 with the exception of last year believes he has
 per acre too much seed. Says we of the Clay
 lands can beat the Bottom gentlemen all the
 time in the oat crop has had and seen
 good oats upon sod but would advise corn
 stubble for certainty - we have had 2 seasons
 in which a striped bug destroyed the crop looks
 upon oats as a very valuable crop for the want
 of labor required, time for planting corn 15 to 20
 days roll after planting. if the worms take
 much grain, till them go in and after they get
 through refurrow your ground and never attempt
 replanting using the Hoe alone - favors
 plowing in the Hill - believes that white corn
 will yield more per acre than yellow - but is later
 in ripening and in more danger from frost
 that there is any difference in the feeding
 qualities of white & yellow - is a mere fancy
 a humbug an illusion.

Mr. D. B. Smith has some Barbary oats they are good
 for nothing except to take premiums at State Fairs
 sows oats early in March if the soil is at all suitable
 the best crop of corn he ever raised was Marshall
 by sowing a log shed both ways suggested this in
 opposition to deep furrowing corn should be
 worked all the time after it comes up
 and the drier the weather the more work
 required

Howard

Mr. Hall in answer to question 1, said

He had sown more on the proper quantity and that you cannot successfully raise two crops of oats in succession. Believes it to be one of the very hardest crops upon land.

on Motion it was ordered that the Constitution be amended by striking out of Article IV the words and act as Treasurer, and that there be added to the Constitution Article VIII reading and there shall be elected annually a Treasurer whose duty it shall be to keep and disburse the funds of the Society upon order of the Secretary upon Motion W. W. Scott was elected Treasurer.

Mr. Saml. Brifenderfer next upon all these vegetables and their cultivation for subject of lecture next meeting on motion Club adjourns to meet in one week.

D. J. P. Pres

W. W. Scott Secy

Farmer's Club ~~Saturday~~ Tuesday April 11th. Club organized by the President S. H. of Boyr in the chair minutes of last meeting read & approved. The President gave the club instructive and important remarks upon a more prompt and early assemblage of the members of the club. Mr. S. Brifenderfer the lecturer of the evening vegetables being the subject and believing that Potatoes are of the greatest importance would make his remarks mostly upon their cultivation. would remark that there are millions of Bushels raised in some of the States. thought that we do not take interest enough in the cultivation of this crop. stated that there are more varieties of Potatoes than of any other vegetable that are now food.

Cultivated 150 varieties in planting

potatoes the Lecturer does not use more than half the quantity of seed generally use he leaves but one eye in a piece and 2 pieces in a hill is in favour of Hill culture in preference to drilling more easily kept clean of weeds would make the hills flat plants shallow would not cover with more than 2 inches of soil 2 years ago raised the bar from 4 small Rose Harrison & Cusick the best to yield there are other vegetables which farmers might cultivate profitably as Carrots Rutabagas Sweet Turnips there can be raise of about 400 bushels per acre Lettuce Cabbage a profitable crop can be raised upon poor ground thinks he could raise fair sized heads in the road raising Onions is profitable would cultivated by sets and not from seed those raised from seed strong and coarse he is defender in raising potatoes and cutting his seed discards the sprout or seed end of his potato thinks them immature

Now Ashenburt had been raised partly upon potatoes and ~~had~~^{not} adopted the opinion of an English acquaintance that it was degrading to raise Potatoes the first and starting point in the cultivation of Potatoes is to have a suitable soil and in good condition has seen good crops of Potatoes raised by taking a Chan sod and plowing 2 furrows then drilling the potato in the furrow then turning a furrow upon the Potatoes then turning furrows as wide as you wish the rows he has had some experience in cultivating Sweet Potatoes and had learned something in the school of experience - and this

School has held good with him in
 being a very dear, ^{one} had heard and word
 that in our climate it was better to
 start the sprouts in a hot bed and
 had learned that hot beds were made
 with fresh stable manure, laying a
 pile of that material on boards he placed
 his Potatoes in it, and to his disappointment
 found they did not sprout but rotted
 did not wish this experience reported for
 the Ashland Times in planting trees he had
 planted them by merely packing a hole large enough
 to take in the roots instead of plowing
 and mowing the entire plot to be planted
 in all these matters we should exercise common
 sense some do not till sweet potatoes this
 is very makes them hard to dig not yielding
 as well as when tilled would rather dig
 four hours tilled than one mow, tilled should
 not be made sharp but flat on top in
 order to retain the water when it rains and
 not have it run off like from the roof of a house
 Mr. Samuel Goring showed specimens of
 whole Belgium Carrots of fine size & thin
 them profitable to raise - the European practice
 of rejecting the bad end of Potatoes was new
 to him is not certain but what it is
 correct on acct of their being too many
 eyes and that part of the potato being worthless
 time and better success in raising potatoes since
 has commenced pulling but two pairs in
 a hill. Prefers large Potatoes for seed
 Mr. Stott has not given much attention to the
 Cultivation of vegetables the early season he
 considered in coming up to the Standard for Potatoes
 the first thing is to secure a good kind for seed
 then with the soil in good condition you may

Effect a remunerative Crop. First land may

be sown to highly making to large or growth of Tops and not enough of Tubers should be planted about same depth of Corn give them at least four workings keeping them clear of weeds & grass till enough to keep them from sun and not leaving more than four stocks in hill a moist humid climate like Ireland thinks will produce larger and better potatoes than we raise believes that the hot sun often injures our crop you cannot raise a crop of Balls and Tubers in New York they invariably take of the blooming carrot. he believes to be worthy of more attention than they receive here likes them cooked and that they are of great importance to feed to Milch cows giving the butter a nice yellow color that this is the secret of N.Y. state farmers securing so much better price for their winter make of butter in cultivating carrots would drill one row then leave space of one row then when he came to them cut & would transplant into the vacant row.

Mr Bushnell would differ with Mr. Simpson in but one item and that was in the depth of planting Potatoes he would cover the seed from 3 to 4 inches if you plant small potatoes you may get only three or four sprouts from the seed but if the potatoes are cut you will get perhaps 10 from the same potato the early Rose is all that can be desired is good either as late or early are good at this time - Onions grown from seed are coarse and strong - Squashes he thinks to be very small that they are inclined to sport and run back to the Pumpkin that it is about out of the question to succeed without hedgesing

The President & Jap thought it of the
 utmost importance to aim at a high
 standard even in the cultivation of Potatoes
 that we are apt to consider them and their
 cultivation as a secondary ^{and secondary} matter. If we would
 consider that an entire nation the Irish nearly
 subsist upon this tuber we would be more
 likely to realize their importance gave his
 experience in Germany that there they select
 the largest and most perfect potatoes rejecting
 the bad or sprout and planting ~~new~~ eyes to
 a hill prefers to have potatoes cut some time
 previous to planting and soon or cut rolled
 in a mixture of plaster and ashes or plaster
 and lime would plant a medium depth
 say three inches
 Mr Armstrong always cultivates Potatoes thinks
 they are of great importance in a family they are
 them he thinks on an average about three times
 a day the year round likes almost all kinds
 of potatoes but can now find the time to
 cultivate would concern in the west that
 had been said as to cultivation of Potatoes
 would till moderately leaving but two or three
 stocks in hill ~~has~~ planted Potatoes on a foot
 and cover with straw turned out well No
 potato equal to the Blue Irishman thinks early
 planting and good rich soil the requisite to ensure
 a crop in the cultivation of Potatoes and Carrots
 has no experience does not believe they can be
 successfully raised here on account of the quantity
 of labor required for their cultivation
 Mr McQuillen in planting ^{early} would put them
 in about half the depth you show does not
 till very high has been quite successful in
 raising squashes mounds the ground all
 over the spot uneasy to squash is the striped

bug he makes small open holes which he places over his and finds them a good protection these holes are good in taking out cabbage plants he can by using these holes transplant even in the driest weather

Rev. A. H. H. would ^{say} why not the telegraph and the common dances of cutting off and rejecting the terminal eyes or buds of potatoes what do the gentlemen have for rejecting and discarding them

Mr. Saml. being next upon the roll was appointed to attend the club ~~at~~ the next meeting he chose vegetables

Club adjourned to meet at usual time

D. F. H.

Very Respectfully

Vermillion Farmers Club Session of Tuesday April 18th 1877

Club organized with the President D. F. H. in the chair minutes read of Session of March and approved.

Mr. Samuel being the regular lecturer of the evening being absent Mr. Nelson was called for by members of the club for his experience in the cultivation of vegetables the subject for the evening.

Mr. Nelson claimed that he labored under a disadvantage in not having heard this subject discussed at the previous session. in the cultivation of vegetables he had never entertained a very high opinion of anything but Potatoes. ~~and~~ that the mode of culture the soil and location had very much to do with quality, he is thoroughly convince a dry and sandy or gravelly soil will produce a much better flavored

richer in starch and Saccharine matter than can possibly be produced upon a moist Clay Soil, and that the climate has full as much to do with their quality. that in New England and Eastern N. York the same varieties are greatly superior to what they are when cultivated with us. he brought from Vermont Three kinds which were there all that could be desired in quality, but when he cultivated them here they degenerate not only in taste but as well in shape in the east they were round, here they formed a long ~~form~~ ^{form}. in New England they do not plow deep for the potato crop and scarcely ever cultivate with a horse but with the hoe in the matter of cultivation he thinks we are much in advance. he never went in for planting them deep but would till moderately in their cultivation - soil may be ~~not~~ ^{not} highly manured for this crop. in his native state it is the most lucrative crop they can raise. in the cultivation of the Squash he never could succeed the burs allways come in first best. Pumpkins he thought scarcely worth the gathering aside from their cultivation. Best. He believed might be profitably cultivated for feed for cattle and sheep but had no experience.

Mr Stafford has paid some attention to the cultivation of Sweet Turnips he sows and transplants same as Cabbage cultivates with horse last year but then amasses Mellons. Burs them to keep over winter in spring puts in cellar and has them sometimes as late as July they will yield more per acre than Potatoes and he values nearly as watercress. they grow well under ground.

has been successful in raising Squashes
is in favor of Cuscow as they are the
only kind that will not mix. They were
degenerate or Hybridized but retain their type.
one load of them for feeding stock is worth
at least two of Common Pumpkins.

Mr. Stott remarked that potatoes are the only
vegetable which he had given much attention
would agree with Mr. Nelson that quality of
our potatoes are not near so good as they are
in the east though that we manage wrong
that in New York they reject stable manure
using hog manure and ashes - for we cutting
potatoes in advance of the time of planting
and rolling in ashes after harvesting we
damage our potatoes badly. They should
always be excluded from light and air
in the east when for market they invariably
barrel them never shipping in bulk and for
storage keep them in dark close cellars or
barrels and vases filled with dry sand
is the very best mode of keeping for family
use. There are Squashes that keep well all
winter and even till June we in their culture
should look to this. would never raise
Pumpkins if he could raise Squashes.

Mr. Bushnell believes the practice of raising
Pumpkins among Corn to be all wrong
that they are a great damage to the corn
far more than the value of the Pumpkins.
we can secure better potatoes by raising them
upon dry sandy or gravelly soil but that
they cultivate the same as other vegetables.
he is well convinced - instance - Muffinmum
wheat when we first cultivated it was
dark, ~~the~~ shape long and stem akin to rye

Now the berry is round and almost white.

Dr Armstrong would ask the indulgence of the club while he found fault with some of the Members. for the gentlemen that gave their singular and unusual experience to find fault and disparage the Pumpkin he thought very ungenerous upon they had been mostly raised upon this vegetable & like a man finding fault with his Mother - he considers them very valuable for feeding Cattle but for hogs of no acpt makes the hog lanky by the way of the kidneys and bladder - thinks air does not ripen Potatoes but only the light. Cabbage a profitable and valuable crop and as against the commonly received opinion he believed it to be a good part of our food or diet contains more Phosphorus than ^{any} other vegetable this goes to make mind and intellect, illustrated his theory by referring to the Prussians in their contest with the French and that the Prussians are a voracious eating nation.

Mr Nelson wanted the priority of finding ^{fault} thought the man guilty of eating Cabbage had but little intellect to commence with too small to improve and that if an intellectual person should happen to eat it, it would so distress him that it would naturally destroy his mental powers that it is a tough, stringy, glutinous substance almost indigestible - that both light and air are injurious to potatoes when they are stored, he is thoroughly convinced, would as far possible exclude them from both. in Pitts he thinks the best way to accomplish this. Agrees with Mr Bucknall in his experience that raising Pumpkins among corn is a serious damage to the corn.

James Clark April 25 1871

Clark sent according to the regular order

D Pop. Card, on the 25th

The regular meeting being a kind of a holiday has
not appeared but, according to the

The President of Pop, I don't understand at all
they are the same, presented to the regular the regular
order for the evening

The speaker announced that Sunday at
that of Rogers and thought it was of importance
to the citizens. There was much to be done and
the want of time, as he had a great many things to
do for the benefit of the whole

To talk of the benefit of Rogers would take time. I don't
think there was the general meeting of Rogers
to talk about. Then the management of the whole

But he would not go first about Rogers.
There is the question of Rogers. I don't know as Rogers is
a good hearted man but I don't think he is fit to
be first as we would wish. It is not adapted
to the locality and when Rogers is first, it is not
adapted. But it is not a big subject to be discussed
in our hope

I am the Potomac river. I don't know from which
the Rogers is very much

The Rogers is a good boy but there is not one
of you here in the country

It is not our job and I don't want to go
over the country. The Rogers is not a good
boy but the poor Rogers is

The speaker appeared the Rogers is a good boy
at all events. But it was not the first we can
get. Would be the Rogers is a good boy of the first rank
know a very good one

He speaks of the Rogers is a good boy of the first rank
know a very good one. But it was not the first we can
get. Would be the Rogers is a good boy of the first rank
know a very good one. But it was not the first we can
get. Would be the Rogers is a good boy of the first rank
know a very good one

... out of a very long ...
... at first ...
... March ...

Mr. G. ...
... the last ...
... in ...
... to ...
... at ...
... but ...
... they ...
... they ...
... the ...

He thought for a time ...

He would take the ...
... the ...

In this way you ...
... just ...

I ...
... will ...
... people ...

Let ...
... I ...
... but ...

Our ...
... a ...
... as ...
... but ...

He ...
... and ...
... but ...
... that ...

Mr. ...

... Mr. ...

... Mr. ...

... to ...
... of ...
... Mr. ...

under addition. Compliments. Mr. Gifford for his interest in nature. He says that much - in education to cast cattle.

He has been in the habit of having the sheep after the first had been run, and by the time that he has finished they are showing the summer brown in spots or mottles.

He does not think it profitable to keep cows.

He does that the year to the end of sheep for say

If said to keep sheep they think he would have them.

Mr. Gifford has had no experience in feeding

But 5 quarts per day is enough for any cow to give. I am not good in stock and not for the best consideration of the good cow

to make sure of

There is a pound of milk in a pound of butter

but in butter is 1/4 lb. in a pound of butter

The butter is sold at better price than the cheese here.

Mr. Boyd thinks in case of late season by the month butter is better of milk and butter and can know what kind of milk it is.

It is white and yellow at such butter.

But I am not the best very much.

Mr. Gifford has been acquainted with the dairy lately.

He has been to the dairy and has seen the cows

and the milk at the dairy. He has seen

the cows and the milk and the butter is better

than before. When you feed a cow the

you will see the first milk for the first time.

He is a good cow that gives the milk for

the first time. He is a good cow that gives the milk for

the first time. He is a good cow that gives the milk for

the first time. He is a good cow that gives the milk for

the first time. He is a good cow that gives the milk for

G. W. W. W.

Friends Club of Ipswich

Palmerston 1891

Barrow's Club met

Mr. C. W. W. in the Chair

Mr. R. W. W. delivered the address

on the subject of the

Speaker compared himself chiefly to the

Commons House and House. The latter

was the subject. He showed very conclusively

that they were a source of profit to the

Government and that no Government could

be without these organs. He then

Mr. Platt made some remarks on the same

subject. 1st the House and House

gave a light description of a House with

reference to a few. He then said that

was a very good one.

Thanks to the meeting after the

meeting.

After this the House and House

and the House followed and the House

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Harmon Club of November 30

Met first Saturday of Aug 1894
 Wm Boyd in the chair
 Minutes of the previous meeting
 read and adopted

Mr Scott gave us a very interesting
 and profitable lecture on the subject
 of farm implements. Think the
 improvement in farm implements has
 had a great deal to do with lifting
 the science of agriculture up to its
 present standard. Compared the
 present implements with those of former
 years. The rate with which grass and
 grain can be harvested now with the
 reaper and mower compared with the
 old way of cutting with the scythe.
 Showing the great benefit
 resulting to the farmer in the same
 improvements in farm implements in
 the last twenty or thirty years.

Mr Scott made some remarks on
 the different kinds of plows, &c. in
 of this revolving. Would have also of
 the various kinds of harrow
 claimed that scuttle hoe would do
 as much work as the common hoe
 in the same length time.

J Bushnell spoke of the great impr-
 ovement in the combine in the last
 50 years at that time i.e. cut grain
 with sickle cleaner with a sheet
 and spirit were packed the grain
 to mill in a barrel and baked
 the bread in a dutch oven.

Mr Scott to deliver the next meeting
 adjourned
 Wm Boyd Sec. J. H. Scott

Hayesville Sept 12th 1871

in accordance with previous adjournment a few of the members of the Vermillion Township Farmers Club met at the office of the Moderator present expressed feelings of discouragement on acct of the illness & attendance this being the second attempt to reorganize the club since the summer vacation. H. M. Scott Read an Essay on Horticulture of which two requested for publication. club adjourned to meet in two weeks with the privilege of meeting in the office of H. C. Johnson Esq.

1. Verenigde Staten

Hagerville © Nov 13th 1971

Harmer Club met according to previous appointment and arranged for the coming winter with Mr Dr Boyd as the Chair and S Nelson as secretary. Before and election of officers it was thought best to amend the constitution as to length of time the officers shall hold their offices article II was ordered amended to read every three months instead of every fourth meeting an election was then held Mr J. L. Boyd being elected President & J. Armstrong Vice Pres and W. N. Scott Sec. The club was then addressed in a very able and acceptable manner by Dr James Yocum on chemistry of the soil and chemistry of vegetation in his address he showed the advantage and beneficial results deriving to the Farmer by a knowledge of

Chemistry also showing in a clear and learned manner the various modes by which ~~the~~ the soil can be analyzed together with the different kinds of fertilizers best adapted to our various kinds of soil. Mr J. G. Ashenbust was then called out by the Pres. he expressed a high opinion of Dr. Stamp and exposed the farmers ignorance and in fact the day was not far distant when doctors teachers & preachers would be able to stand on the high eminence to which the farmer has attained. He also as many others did requested Dr. Spencer to furnish a copy of his address for publication so Dr. Stamp obliged Dr. Spencer's address and made many remarks ~~which~~ were well received on the general principles of farming. Mr J. B. Boyd went back on Dr. Spencer's chemistry, condemning the idea of chemistry ~~being~~ as its knowledge as being of any importance or benefit to the farmer by ridiculing the ignorance of his German neighbor who knows nothing of chemistry but does know how to raise good crops, remarks were also made by Thos. Bushnell, B. W. Kent, Wm. Marked, R. A. + Glen & others concerning the varieties of soils & how best adapted to the growth of different kinds of plants. They then talked & gaped much about the different kinds of gopher - The club then on motion resolved to adjourn the Club the coming winter at not later than 8 1/2 o'clock. R. A. + Glen was then appointed to address the Club at its next meeting the Club then adjourned to meet two weeks from to night.

The Boyfree

A Nelson &
by request

Session of Farmers Club of
 Hamilton Township Nov 4th 1871
 Mr. Joseph H. Boyd in the Chair H. Abbott
 Secy at this the first of the regular sessions
 of the Club for the winter the Room
 was well filled with Members and they
 appeared not only in good humor with
 themselves but with their neighbors
 Mr. H. G. Green appointed at previous meeting
 to give the lecture of the evening was not
 present the President called upon Dr. P. Brantley
 for ~~Dr. P. Brantley~~ ^{Dr. P. Brantley} to interpret the Club
 he declined to do so, prepared to make any
 remarks and in what he might say there would perhaps
 be suggestions not new to the Club but that a
 good story will have reputation he believes that
 to the coming farmer it is of the greatest
 importance that he should be so much of a chemist as
 to be able to know the chemical qualities and
 constituents of the soil he cultivates so that when
 he suffers a failure of crop and it cannot
 be rectified for by an unfavorable season he
 may be able to see that failure he having the
 knowledge by which he will know in what
 elements his soil is deficient whether of Lime
 or Nitrogen ammonia or any other the constituents that
 go to make plant food, not only know this
 but equally well ~~how to~~ ^{the} method the most
 certain and economic of supplying that
 deficiency. all plants derive the most of the
 nourishment of sustenance and growth from the
 atmosphere that is through their leaves they inspire
 and expire the leaves of plants acting in some
 measure the same office that lungs do in the
 animal world thus the Doctor illustrated by
 a tree plant in Pot of Earth how when that
 tree may have increased its weight hundreds of pounds

the soil on the spot will have lost nothing in weight; yet the soil must be in proper condition loose and friable so the strength and moisture can penetrate it and it has to possess ingredients that go to make plant food one of these constituents is lime in some of its forms. In our neighborhood there is sufficient lime seen in a small sandstone this is indicated by the hardness of the well and spring water.

Mr. George Stoll said we are creatures of observation and imitation and this will account for the success and prosperity of some farmers who are of slightly ordinary intelligence and have no knowledge of chemistry or the constituents of the soil. Cereals or vegetables but they are close observers of their neighbors successes and this successful neighbor has gotten his knowledge in the same way but trace the matter up and will most probably end with a person that knows something of what the soil requires chemically to make it produce beautiful crops. Besides there is a marked improvement in agriculture and that much of this improvement is due to our imitative disposition. Referred to neighbor who has taken a poor worn out farm and by plaster and clover has made it one of the most productive in the neighborhood and that this person does only pursue his course of farming as an imitator.

Mr. J. J. Bagg would willingly yet cheerfully give his ideas about fertilizers. Farming is business to do successfully ~~the~~ man must have more brain than for any other occupation or profession he would not except doctor lawyer or preacher. Referred to Noble's neighbor although a little man he is large enough to watch the corners in farming.

And that he can teach us in ways we
have not known the place before my club two
persons the one highly educated the other ignorant
the cultivated person was a careless and lazy
and did not succeed while the ignorant being
industrious and careful came out on the top of
the pile - In one respect do farmers show their
careless laziness more than in any other, and
that is letting their stock roam over their fields
and farms when the ground is in a state of
winter packing their land till it becomes
as hard as the public Road. ~~He~~ would say
to the club gentlemen keep your cattle horses
and other stock off your fields when they
are wet keep them off and then there will
much less talk about fertilizers and much
less need for them. I go in for Malorizing
the soil and keeping it Malorized I advise
the members of this farmers club to make their
deposits with the Bank called another Bank
it is a very old Bank but has always paid
interest to her depositors and is always good
for the principle there is one Club that is
always drawing out of this bank and never
putting in: Yes Banking off to the rail road
by the wagon load there is another Club
that are always making deposits and there -
interest and principal are always increasing -
Dr Yocum. No subject is of greater importance
to the farmer than Manures and fertilizers he
should not only know how to make the most
and best nor should he stop there but he
should know how to take care of it so that
it will lose none of its inherent food which it
contains. The doctor then took hold of three
cases of Sickley Soil and gave the Club the
diagnosis prognosis and treatment of each
patient The first patient had a very fine

Look the whole subject yellow cold and with a tight skin pores completely closed. Under by the patient was suffering from constipation the doctor prescribed a cathartic of long stem he claimed it would loosen the patient mechanically the second patient has a dark complexion was originally of good constitution but from bad usage has become rather feeble prescription an emetic of well rot barnyard manure. The third was a gravel patient with symptoms of diabetes prescription an ammoniac pills made mostly fresh stable manure. Time the doctor considers a good fertilizer clover contains a large percentage of lime. Plaster or sulphate of lime is a good and perhaps the best absorbent attract to moisture and it is believed ammonia from the atmosphere the atmosphere contains several elements of plant food.

Rev. J. Abdenhurst, I do not certain whether he had brains enough to talk to a farmers Club but of one thing he felt certain that when our soil failed to produce good crops. We must get back into that soil the elements wanting and that have been exhausted. It is impossible to do it with barnyard manure the supply being deficient how shall we do it then he believed, the only practical way was by grass especially by clover then the question is how to use that clover whether to let it grow up and rot upon the surface or plow it under in a green state plowed under green, in decaying it will form acetic acid which might possibly injure the first crop. Clover by analyzing seems to have about every thing required in a fertilizer. Mr. A. Wilson has had but one experience in plowing clover under and this was not satisfactory.

Could see no benefit for either first water crops believed to let a good crop of clover rot upon the top is equal to good coating of Harzard Manure. They then gave the club two ways of committing suicide. let any person buy and take as per directions all the quack patent Medicines advertised and it will kill them certain and so if you should attempt to all and get all that you may find recommended in books it will harm you sure not that there is not true things in medicines and valuable information in Books on Agriculture the thing is to judge between things and quackery. If his sons should determine to be farmers he would have them be educated in the things of Agriculture that they may be capable of knowing what to adopt and what reject. To know for themselves what their soil requires and the best method of remedying deficiencies then they will be doing their farming intelligently and when a man does a thing intelligently then will he take pleasure in it. In any occupation or profession in which we take pleasure and in no other are we likely to be successful.

Mr J. Bushnell good farming has very much to do in producing good crops. by good farming he meant deep plowing and doubling the plowing when the ground is dry. instance his neighbors success which could not be attributed to use of fertilizers but simply to good culture lime is a good fertilizer because like guano it is animal matter that limestone is the work or deposit of the Coral insect Dr Gossum would say Mr Bushnell had just as good authority to say that limestone is a vegetable product as to say it is animal matter.

Mr. J. S. Gabbell has an experience that is adverse to the profit and propriety of blowing down green Clover.

Dr H. Armstrong would ask the privilege of briefly refuting some of errors of the evening. He ~~thinks~~ is not a member of the Club & it does not make much difference what he does say but we are unwilling that any person shall undertake to instruct the Club and be ignorant as to contend that plaster is not sulphate of lime all such absurdities must be contradicted or the Club will not suppose that the Club have any more intelligence than he ~~should~~ be instructor.

Mr. Duerbeck is a member of the Club and fears what he says may do injury and it is important that when members make misstatements that they be contradicted and corrected. The members affirm that Armstrong like grass is an animal product the work of the coral insect. to say that a mineral limestone is is but animal forces is making a hard substance out of a very soft volatile one and that so far as the the member having seen this clay in limestone the marks where the coral ^{insects} wriggle while they relined themselves it is all a wiggle of the gentleman's imagination.

Mr. Alexander Wilson was appointed to deliver the lecture at the next session subject fishing and care of Stock adjourned to next time week from last Tuesday evening.

J. H. Boyl. Sec

W. H. D. Jr

Episcopus of Farmers Club of

Peru Township Dec 12th 1871

Dr H. Armstrong Vice Pres in the chair

A good attendance of Members

Minutes of previous Episcopus read and when there
was offered a motion of approval and
adoption by the Club, some of the Members
doubted the propriety of adopting, rather insinuating
that the pen of the reporter had wandered
through or over the truth and that most of
Bourbon Muncie must have dictated the
record or that he was again on his
knech striding a league at each step and
the Secretary was attempting to follow him
the minutes were finally adopted by the
Club and if the bawling is a despised
monstrosity so much paternity will account
for it. Mr. S. J. Nelson the Episcopus of Episcopus
for this Episcopus not present the chair against
remarks from her of J. Ashenbrenner who thought
the subject selected for the lecture at the time would
be proper one for discussion as if any member had
thought anything to say this evening it would be
in the interest of feeding and taking care of stock &
from his little of experience it seemed to him to be
one branch of Agriculture in its minutiae of
Theory and practice to be of the first importance
this is especially important in climate like ours
with a winter in it with many extremes of
temperature. While some branches of Agriculture
can only be learned practically the feeding of stock
may be profitably learned and pursued theoretically
and into the theory of feeding would come the study
of chemistry not that every farmer is expected to have
his laboratory and be able by experiment to detect all
the nice subtle affinities, when the skilled practical
chemist may be capable of cooking and analyzing,

But that every farmer should know so much of chemistry as to understand what cereal or vegetable may be best adapted to produce growth in any animal and what are the best for fattening, when that is the end sought when we know this much of theory than we may learn by experience and practically how to manage the care and feed of stock we may practically learn the protection necessary in the way of stabling the amount of food required for each kind of animal to prevent the most rapid growth and when to fatten is the end sought will understand the most economic system.

Dr. Rags has to confess that he is ill prepared for the discussion of the subject before this Farmers Club of Vermillion Township - have no hesitating in saying and giving the opinion that feeding and taking care of stock is of the most vital importance; what we wish to know and what this Farmers Club of Vermillion Township would like to know and understand; is what system or feeding is most profitable? yes gentlemen that is the question. I will take up the care and treatment of the horse being more familiar with this care than with any other kind of stock, do not expect to give all the care and treatment of the horse nor as much as I am competent to give as I do not wish to rob members of their time; the horse does not require the same kind of treatment as does some other kind of stock. And since the horse is of such great importance to ~~the~~ human family and ourselves we should come right down to the point now - it suits the hog to wallow in the mud but a mud hole is not a place for a horse. Some people put their horses under bank barns where it is dark & damp now this is no place for a horse.

if you want to take proper care of him
 and give him the right kind of treatment the
 stabling in which he is kept should be
 above ground perfectly dry light and well
 ventilated: I am gentlemen of the former
 club down on bank barns because they are
 almost invariably dark damp and wet. Now
 people that stick there horses in a hole in the
 ground and they get weak eyes inflammation of
 the lungs &c with hair standing the wrong
 way? have nothing to blame but their sticking
 them in a hole! Yes gentlemen of the former
 Club if you want to keep your horse sleek
 and nice as a pin you must keep him
 comfortable yes comfortable is the word
 a comfortable and dry stable with a gravel
 floor with regular feed and water.
 Regular feed and watering has much to do
 with the keeping of a horse: if you have a
 well lighted but not ventilated dry stable above ground
 and feed and water regular feed ~~and keep~~
 a horse fat on his grain and hay that
 it will take to keep a Malabar from starving
 gave military regulations of Europe that the
 hay is weighed or ration out to the horse;
 Most of us farmers throw into the manger
 to much hay the horse breathing on it
 makes it rancid and foul and on this
 account mangers should never be used
 unless gentlemen are the thing farmers
 need use very little grain in winter if
 they have good Clover hay, Oats is the best
 feed when horses are doing hard heavy
 work. Bran Mashies constitutes a great benefit
 to horses kept constantly stabled (Furston could
 gravel floors be dispensed with entirely)
 it can be made by making hot water of stall
 and keep in it a mixture of clay and

Cow droppings have your horse, during the
 day, stand with front feet in the manure
 this will keep him from getting pinched.
~~But~~ Cleanliness is an important point
 in what a horse requires for health and for that
 reason give me gravel floors. Would just give
 a few words of instruction about the cow - a
 next to the horse they of the greatest importance.
 do not think brick-barns so objectionable for
 cattle as for horses, Fresh Cows need something
 more than hay and that something should be
 ground feed and it should be heated or boiled
 to this should be occasionally wetted herbs such
 as Mangelwurzel turnips Carrots & potatoes. Kind
 treatment should always be given even in
 milking and where would you go to get the
 girls to milk a cow and treat her kindly
 city girls do not know anything about milking
 City girls can do no kind of milking
 as well as girls raised in the country
 by kind treatment the cow will soon know
 her master's crib and reward him for
 his kindness.

Dr. Gessner there is two kinds of
 food Nitrogenized and un-nitrogenized.
 Nitrogenized is necessary to build up the
 animal tissues and muscle and supply the
 constant waste of these tissues and muscle
 while the un-nitrogenized sustains the animal heat
 and, whatever is not required to sustain and keep up
 the animal heat ~~this~~ balance goes to make
 fat hence to growing animals if we
 wish to promote the growth we should feed
 nitrogenized food the same kind of feed is
 required by those who have to do hard work.
 If fattening the thing desired they should be
 fed un-nitrogenized food this kind of feed
 will be a fuel to the system and act as a

against the cold (quest by Van Schoonduat
 is there any kind of food destitute of water your
 answer is not certain that there is any entirely
 but some that come very close. Now for any
 purpose whether for fattening or growth
 the food should be in such form that it
 will be easily masticated and not enter the
 stomach in the form of whole grain coated
 as most kinds of grain are with a flinty
 armor that it is impossible for the gastric
 juice to dissolve or operate upon. And it
 will ^{take} much less grain to keep or fatten an
 animal if it is ground and cooked. Question
 would it not be better sowed in quick hard
 soil you may get it too soon the sprouting or
Maize point is the stage in fermentation
 that grain ^{but} is the most nutritious whenever
 fermentation goes further than sprouting then
 it approaches the alcoholic and as it approaches
 this nutrition is lost
 Mr. ~~part~~ Stott the subject for consideration this
 evening as to the necessity of its being thoroughly
 understood there can be no question. does not
 believe with some of club seem to that back-
 -barns are ~~very~~ very objectionable they are
 certainly warmer as a rule than stalling above
 ground and are very valuable if you should
 leave them entirely open upon one side
 allowing stock to see its protection from storms of
 rain that blow would to suit themselves. But
 they may be so ventilated and lifted so as to make
 the very best kind of close stalling. Always
 built straw ~~stack~~ and his stock invariably work
 it down during the winter so that it is well
 rotted when the season comes for hauling it
 out. Has seen board boxes in place of
 racks and mangers that he believes to be an
 improvement over either. They are made four or

five feet wide by one to two feet deep at upper end the upper end is attached to the hay loft or floor at lower end it is one to one half feet square. Farmers that neglect to take care of their fodder are very great losers as fodder properly taken care of is of more value for thick cows than the say but hay sheep he finds the most difficult stock to manage as long as the ground is bare they refuse to eat hay or fodder, and the grass is often so short killed by frost and drought that they cannot get sufficient on the fields to keep them from running down. I have always from a boy been used to having small barrel (rotation) by chain (I was not small the same effect upon animals that larger bear small has upon man) and I think perhaps it may have the effect to blot and puff instead of making solid flesh.

Rev. J. Schenck would ask what is the cheapest feed a farmer can raise (answer by chain) (Corn of course) Schenck this may be true of farms like the doctor with from 3 to 500 acres but not all of us have only 3 to 5 acres should not a part of the crop in that case be roots J. B. Smith says by his experience would rather have his straw plowed under than to have it rot in barn yard the work of doing it being the great drawback would have every fence filled with it, Turnips regards of very little importance almost worthless for ~~catfeed~~ catfeed for cattle question how are they for sheep? has never had any experience.

Mr. J. Thurgeon member of the club in their remarks this evening have pointed the same course as do the agricultural papers they have told us what is required to make muscle bone and fat but have forgotten

to inform us what kind of grain is the best to produce any desired effect would like information on this point

Dr. Armstrong requested to answer the Surgeons questions. Said question sprung upon him rather suddenly for him to give full and explicit answers for growing and work animals as to the regards as best as contains a larger percentage of gluten which ~~is~~ this material for muscle and hence it is also rich in phosphate line this is required for bones Corn is the best where following is the end sought

L. J. C. Dr. J. J. C. and General Davis were appointed finance committee to settle debts of the Club adjourned to meet here next from this evening

Wm. H. H. &c

Dr. Armstrong Dr.

Session of Farmers Club of Vermillion Township
 Decm 26th 1871. Mr. J. H. H. H. in the chair
 On fair attendance of members club was gratified that a number ~~young~~ men ~~not~~ members were present and seem to take an interest in the remarks and suggestions of the members.
 The by laws and roll of club introduced Mr. H. Nelson as the lecturer of the evening. He paid a glowing tribute of respect to members of the club as being among the very best of farmers and that he did not anticipate that he could either impart information or instruction to some of the members, showed to by the minutes that had just been read that there is a deal among us taking notes and if he should not print them they can at least be read in after time it would have a tendency to make him cheap of his expressions

in my little experience of raising calves and feeding
 have learned practically that with cattle the time
 to start a calf is with the calf and that this
 starting a calf with its feed and care will be
 successful just in the way that nature dictates
 for all animals that live upon milk. It is a most
 singular and unaccountable thing that the calf is
 the only animal (without an accident) that is compelled
 to start upon a different kind of food taken in
 a different way from what it would do if left
 to follow the promptings of instinct and nature in
 that way the check vat and churn cloth would
 never come between the calf and its mother
 instead then of starting the calf to grow according
 nature we start it wrong and foremost and
 by a system of cruelty retard its growth dwarf
 and stunt it from the start. Not only is it
 an unnatural treatment of the calf, but it is not
 economy for the quantity and quality of food
 of which you rob the calf during the summer
 has to be more than made up in the care
 and effort of the first winter to even succeed
 in wintering it over. Then you commence the
 second summer with an animal not as large
 and thrifty as it should have been at 3th
 4 months old, and this dwarfing stunting at
 the start cannot be improved by any after
 care treatment or feed, but at the end of two
 years your calf is not what it should have
 at the end of the first year. There is something
 in breeds of animals and I believe very much
 but a durham or elvon breed (as is ordinarily
 done with our natives and grades) will in two or
 three generations will scarcely reach the natives
 all fancy breeders (as they are called) know better than
 to permit any such skin flint stringy policy
 raise as many calves as you may by this
 stunting system (and even with the very best breed)

and will never succeed in raising animals that will ~~keep from 10 to 100 lbs.~~ His opinion with calf left to run with cow is that at 18 months old it had nearly matured to run at foot as the mother of a calf, while two raised at same time by hand and of equally good breed were no better at the end of 3 years - so far as winter management of all kinds of animals if you wish them to thrive and do well keep them loose, whenever an animal becomes restless it will gait up and the hair stand the wrong way - have feed for several years a small quantity oil cake as often as ^{once} every other as for fattening cattle that is the occasional feeding for this purpose and not making a regular business of it, believes that the expense of stabling, getting feed ground and cooked and only counting interest on investment of barn, that a man will never see his money back, in the difference between feeding in an open lot. If the out door feeding is pursued judiciously, by having dogs to follow taking up whatever the cattle may fail to masticate and digest, here the lecturer gave arithmetical statistics to prove his theory making the cost of husking shelling milking and the other expense of feeding ground and cooked corn etc. 1 cent per bushel more than half the value of present price, beside feeding in stable is a very laborious kind of work and a kind of which there is no remission, there is not anything to be done on the farm but what he has better inclination and stomachs for doing than cleaning stables if any gentleman farmer, dealing in that kind of property I shall never interfere or become a rival in his trade, had enough of it in boyhood to dampen his ardor for any such fancy occupation, believes that cattle fed in ~~an~~ grass lot with only the protection of hay or straw stack will feed with a more regular appetite and not so

liable to cloy or stall by overfeeding as those kept
 stable. But so far as measure is to be taken the
 account of profits it is a very expensive way of obtaining
 it, would rather paralyze so far as he is interested by
 raising close and letting it rot when it grows pale
 but it is the only practical way of enriching land
 easily and thoroughly. Every farmer has cattle that he
 keeps over which he has no intention of fattening,
 it is bad policy and a serious loss to ever let the run
 down one become poor. The rule should be to stent the
 calf right give it enough feed so that it will not go
 back and same care in feeding should be given to
 the mature animal. Sheep are more difficult to manage
 than almost any other stock in his experience when he
 had but a few it appeared to him that the cut nothing
 at least they seemed to be nothing coming from the pasture
 fields. Thought they were just the kind of stock pitched
 in for between 4 & 500 there was very soon plenty of
 poor ones selected out in the winter a lot of the
 best commenced to feed them grain moderately at first
 found no improvement increased the feed and care about
 this time they commenced to die and the more they were
 fed the faster they died. If you poor sheep are satisfied
 that the time to commence feeding grain is early in
 the fall while the pasture is good, can improve them
 some in two months and with half the grain improve
 them more in one month than you can in two
 in the winter by commencing in this way and feeding
 a little grain every day you can winter successfully
 a very poor sheep —

Now for Stall thinks he should not have been
 called out this evening as he had given his views
 and experience pretty fully at the last session and
 there are members present who have given us no
 expression as to either their theory or practice
 it was an adage in the east where he lived his
 apprenticeship in farming; that the first feed you
 should give your stock in the fall should be a feed

and of some Boards in the shape of weatherboarding
 would repeat his remarks made at last session that
 a bank-barn partially open or in its shed shed open
 on both or east side should be capable to grow
 cattle - agrees with Mr. Nelson that it is poor policy
 to heat the calf over the head with the China dash
 heat that one good cow will furnish sustenance
 for two calves and that they will do about as
 well as if each ran with its dam, believes that
 a cow that is in good condition the 1st of December
 is about half wintered when compared with one that
 is poor and starved at that time. If any of the club
 have paid attention to market reports of farm produce
 in New York they may have noticed that this is
 York State butter quoted at 20 cents while this
 month 32 & 35 cents now there is a run for this
 nearly double price which the New York farmer receives
 over the Ohio producer and in these days of hard roads
 it is not an act of meanness of market but if you were
 to go among these dairy farmers of New York you would
 find they had raised their acres of clover they have
 changed methods by the turn by feeding them in winter
 they keep up ~~the~~ ^{the} quantity and quality of
 their milk ^{improving} a value to the ^{but} as freight and other
 as that made in May this with the skill they have
 in making up packing places them so far ahead in
 receipts ^{profits} over us

J. B. Smith Esq. has but a few words to add in part
 he now endorses and approves the lecture of the evening but
 as part his experience teaches him to reject as bad advice
 he would start with lecturer and agree with him that we
 should exercise care and vigilance to select the best breed
 when he had you there for they would have to part company
 as far as the ^{best} raising calves for economical propitiously
 you raise a calf by letting it run with its dam
 will assuredly (if it is at all a good breed) make a
 very fine animal of it. The lecture has been some
 on figures and the saying is they will not mislead

How will it stand with you only but is to follow the
 laws of Nature the ~~smith~~ of it comes in better or
 cheese would be worth for the season \$20 to \$30 and you
 cannot average yearlings at over \$10 to \$15 by that you
 would be from \$15 to \$20 better off if you ~~would~~ killed
 the calf the first time you saw it. We not know very
 much about raising calves by ~~hand~~ our women taking
 charge of that speciality. But do know that they make
 butter and raise very good calves and that stock raised
 by this system is gentle ~~Domesticated~~ easy managed from
 the start. would ~~stand~~ in warm stalling the first winter
 and feed generously. with legs as his experience has been
 his ~~instructor~~ believes there is just as much in the breast
 as in the feed has had breeds at from 15 to 18 months could
 make weigh from 1 to 200 pounds while he had had others
 that even with more feed could not at same age make weight
 more than 2 to 300 pounds one lot that he especially recollects
 was always short and fat and the very best could do with
 could scarcely make them ~~stand~~ 200 (question how did you
 feed) answer! Corn entirely; sometimes you started young corn
 is not the kind of feed for pigs or growing hogs does
 not contain enough material that is required to make bone
 and muscle) so far forth as my experience goes these
 are the most profitable that I have kept. & then only fed
 a very small quantity of grain and that is the best young
 lambs keep them ~~stand~~ under back barn in bad weather
 and nights in winter but never more than 20 to 100 in
 a flock keep in pasture about same size 70 to 100 his
 breeding ewes does not feed grain formerly did and had
 bad success in their lambing would that feeding grain
 caused the trouble just feeding it and since had had no
 further trouble last year he started with 70 sheep
 60 of them ~~ewes~~ ^{lambing} sold wool for \$166 top of the poorest
 for \$11 1/2 per head the balance for 23 ²² ~~lamb~~ for \$3 per head
 has never followed sheep ~~for~~ a business sold one flock
 in the winter and in the contract agreed to feed them
 grain for six weeks this was in after part of winter
 and so far forth as that experiment went

it did not agree with the theory of friend Nelson
 the purchaser, but it was not ~~disproven~~ in the
 contrast of improvement: has found that by stabling
 sheep and keeping it well littered with straw that it
 makes a paying quantity of manure and this kind
 of manure will fertilize double the amount of land
 that ordinary barn yard and at this rate will will
 produce better crops than last season. was surprised
 almost amazed by the remarks of ~~the~~ lecturer in
 reference to question of manure so far as having
 done all that kind of work that he has any
 stomach for ~~how~~ perhaps don't ~~they~~ show and that
 judging by appearances (pointing to silver locks) that the
 time is about here when I should be discharged from that
 kind of employment. But we are not associated
 here to tell of our likes or dislikes of when or inclination
 may lead or what our stomachs will bear. But to
 give that advice and counsel to one another and
 more particularly to our younger men that will
 make them (if they follow our precepts and example)
 model and successful farmers. The true policy
 is to stable if at all practicable all kinds of stock
 even the hay pen should be so constructed that there
 will be no waste and in fattening a lot of hogs
 you may get 6 or 10 loads of the ~~very~~ best kind of fertilizer
 has an opinion that ground just cost more
 than it comes to. So far forth as racks or mangers
 are used think both are unnecessary would just as
 soon have his horse turned to a stack or pile of hay
 of 60 tons as to have it doled out to him by the
 mouthful or feed. There would be no more waste by
 one ~~man~~ than by the other and the horse will do
 just as well in feeding I would throw the hay on the
 floor in front of the horse and enough at a time
 to do him for a day or two, as to feeding oil cake
 or any lupine food has never seen the necessity for
 it all you have to do is feed more corn and you
 will not be troubled with any constipation

Mr David Sturgeon. did not join the club with the expectation of being an instructor but because he was seeking information. would just say that Mr Smith has some faculty of keeping his sheep in good condition and the suggestions he has given us members should remain as the practical way to manage this kind of stock with profit ~~and to an advantage~~ believing the behavior is correct in the way he recommends to raise calves has had but one experience with calf that came with its mother and it came out much better than any he has ever raised in the ordinary way

Dr J. McCam was much interested and instructed by the lecture of the evening but believes the lecturer is much better in practice than theory that his example is better than his precept. has seen a specimen of his feeding and in that instance had had everything required to build up ~~sub~~ waste in the system and all so nicely cooked that it was calculated to tempt the appetite of the stock he was feeding, to eat a surfeit & the food of man and animal is originally inorganic matter. Now there is no process by which the animal can use this inorganic matter in its crude state, to either promote their growth or even to supply the most of living constantly going on. But plants are so constituted that they use in their growth and development inorganic substances and animals are so organized that they can appropriate to their growth these plants and when they have taken from the plant its nutritive qualities the balance and eventually the animal returns to the original inorganic thus the circuit is ever kept up thus plant retains carbon and gives off oxygen the animal retains oxygen and gives off carbon. Now for the full and complete development of the plant the inorganic matter that furnishes its development must be under certain favorable conditions

and first to the plant food of animals and the conditions are modified and varied by climate and season: thus the green or leafy plant will esteem a bunch of candles or a mug of blubber oil as the most desirable food that he can have and they would reject a lemon or orange as very insignificant and of no account as food, while a resident of the torrid zone he disgusted and reject any fatty substance. The temperature of the blood in man and animals is about 98° Fahrenheit whereas the temperature of the atmosphere is such that it will run the blood below this maximum of warmth then it has to be rectified by other food: applying this principle of animal life to the advice of the lecturer and let animals run in open lot expose to all the cold and inclemency of winter will be at the expense of other - and if the weather should be extreme cold the animal would not be able to take enough food to promote its growth or fattening there is still another objection to animals running at large if you wish to feed with the least expense every motion of limb or body is at the expense and waste of the muscular system so that the greater an animal is kept the up the less in this way and the food taken will only have to promote the growth and fattening and not supply the waste incurred by exercise and cold, as to raising calves there is not much in favour of the lecturer's course of Kuster letting them run with cows, especially in warm weather. You can skim the milk of the cream and there will still be left for the calf in the remaining if kept sweet all that is required to make bone muscle and tendon everything required for its growth. the cream you have taken would only have produced fat and this is of little importance so far as growth is concerned. gestation by Kilm's exercise not calculated to develop muscle matter. It is a means of hardening & toughening

if you want an animal for labor than it must have exercise. But if for the shambles it is mostly desired that it should be tender and juicy.

Dr H. Thompson this subject has become very interesting and the extended discussion of two evenings has shown the Club that the care and feeding of stock has much to do with our success as farmers; having a good breed is an important thing to start with. But this is so generally caught and acknowledged that sharpers operate and impose fictitious and often ordinary stock at exorbitant prices upon the often too credulous and gullible farmers. No kind of stock should ever be stunted. But is not saying that the calf should run with the cow but should be kept stabled at first the first winter and fed grain, we raise — our stock in a slipshod kind of way never get their food ground or have it cooked — have about 300 sheep on farm at present so far this winter have not feed them anything, ~~we have~~ expect them to average at shearing 1/2 lb less than we have about 20 head of cattle and 100 of horses. The prospect on the sheep will buy all the cattle and horses we have. We are not agreed with Aspin Smith as to feeding stock. Some intended to raise lambs they should have a little grain to strengthen them for the duties of maturity (question do have trouble in lambing season) however we are trying to increase the size of our sheep by raising large males this naturally leads to some difficulty in this way when we did not try to increase size had no difficulty.

Reverend J. J. Whitcomb a single trial is not always satisfactory in any undertaking and we should only as a rule come to a conclusion upon a basis of experiment. Have about come to the

Conclusion that town is the cheapest place to raise ~~stock~~ particularly hogs. thinks the town council have seen it in the same light and have gone into the hog business, then raising them in the streets and alleys is a sanitary measure, they use up the garbage. His way of raising is all clear profit - has one experience in raising a calf in town. and his calf was not like the "mans" that suckled two cows for his never sucked any cow but has always shifted for its self and it has held its own remarkable well for it is still able to get its living in the same way if he should ever try the experiment again may not be successful as he may not again get so intelligent a calf -

Mr. Samuel Ewing. believes the Wilsons plan of letting the calf run with the cow the correct one for raising good cattle (particularly Wilson is that not the way they raise them in Illinois?) they like your plan and in the fall have calves about as good as our two year olds. has had two calves to suck one cow that seemed to do almost as well as if there had been but one. has had one on farm past summer to run with cow and it is worth three others raised by hand - is interested in the chicken trade has about 25 hens about same ^{number} last year and thought they were about to make him a fortune got a basket of eggs about every week. but this fall and winter has but got an

egg and now feels that chickens are a poor investment would like the wisdom and intelligence of the Club to point out a remedy (Mr. Ewing was filled with many questions at hand. Colman fresh meat ground bone lime & gravel their questions were answered mostly in negative conclusion of club would seem to be, if Father Ewing wishes to put his hens under an egg tribute he must feed them the material to make eggs and then they will be compelled to lay them.

Finance Committee reported four dollars
 Jan 27th had for committee of last winter
 Club order it paid Rev. J. J. Schenck and
 Dr. J. J. Schenck were elected corresponding Secy
 & furnish copies of Proceedings for publication
 discussion was made the order for next session
 of the convention

Resolved that the wages of farm hands and mechanics
 are to high for the price of farm products
 adjourned to meet in one week from this evening
 in room No 2 over store of W. D. Scott & Co. ^{at 8 o'clock}
 W. D. Scott & Co. ^{at 8 o'clock} J. H. Boyd Pres

Harmon Club of permission Journal

Session of Jan 2nd 1872

for H. Boyd president in the chair W. D. Scott Secy
 A good attendance of members - in accordance with
 the programme of the last session Dr. Smith opened
 as the leader to defend the position that labor of
 farm hands and mechanics are to high if for the price
 of the products command Dr. H. Brewster in the defence
 of the price of labor. Mr. Smith in the discussion
 of the affirmative does not intend and it is not
 necessary to show capital and labor in opposition or to make
 unity between them. Without capital the question
 of wages for labor would never be discussed or exist, for
 there would be no one to employ labor or carry on the
 great undertakings of society and without labor
 Capital would be valueless. They are mutually dependent
 upon each other and there should be any rivalry
 show a difficulty we meet in this discussion, is, that there is
 no fixed wages if you do not make a bargain in advance
 the man will demand \$4 for his days work another \$4.50
 and a third \$1.50 and perhaps the dollar man will have
 done you the best days work and particularly is the
 want of uniformity applicable to mechanics, and for
 any job of repairing you cannot as rule get them to
 give names a price in advance. This however are

opportunity for ^{an} exorbitant price after the work is done
 we have got an understanding of the cause the negative
 effect to know in this discussion it will be their aim to
 get up a new issue and if people make a ^{very} big
 effort, fly as with how we going to help how
 can it be remedied we have no more to do with
 the cause or the cure, than they have. They intend to
 prescribe a remedy and that is just let it alone and
 prices will regulate themselves. Now we will leave although
 outside of the question & that which we feel very confident
 is the reason of the exorbitant prices we have to
 pay day laborers and mechanics. There is a dearth
 of laborers and of mechanics - (one but not confined
 from paper to ~~being~~ a scarcity of labor throughout the
 country). Then there is no such ~~regulating~~ as the thing
 regulating it self. when vitality has left the system
 there cannot be any way to effect a cure and restore a health
 when there is a dearth of laborers it loses the life
 of competition and becomes incurable. ~~and~~ just as
 willing to concede the justice and the morality of the precept
 that the laborer is worthy of his hire as any one and
 his feelings are in sympathy with the people of the U.S.
 when they compared the highest ^{prices} within their gift in return
 upon a rail splitter a tailor and a farmer. The highest
 we can render a man is to say of him
 truthfully he is honest. The next in place would
 be to say he is industrious, but conceding all
 this there are still other considerations. Agriculture is
 the basis of all prosperity whether national or individual
 and whenever farming fails from any cause there is
 not much left for anybody. The high price of ^{land} does not so
 seriously affect the rich farmer as it does the class we would
 name as mediocre men owning 60 to 100 acres, perhaps a
 man with this amount of land has the force within
 command to let his own family to work it. If he not this
 then if any sickness or casualty should be his lot.
 He must at produce and labor now rates run behind
 his expenses will be more than the income.

case as illustrating the fact the case of his tenant farming for half of crop there is more than he wants and he is compelled to hire but to a limited ^{extent} and yet with good health of self and family industrious and frugal he finds he is not getting the amount he should have given up his tenancy expecting to make ^{more} as a Carpenter. The present inflated prices ~~for labor~~ have been established when we were getting what is denominated as war prices wheat \$2.50 to \$3.00 corn 80 cents to \$1.00 pork 10c to 15c and so on. It has been said to be anticipated that the demand was fairly balanced all round ~~but~~ the facts are quite different. None of the products of the farm are bring an average of half their price, while labor has held on with ~~steadfast~~ and most successful tenacity for its exaggerated prices.

Dr H Armstrong to maintain the regulation of this question successfully would require but to lay down one proposition the truth of which he believed to be acknowledged by every political economist. That proposition is that Demand and supply always regulate prices, that our necessities are about the only thing that will cause us to give a price for any article and the photograph of that which fixes its value or market price. Now anything that is a necessity and even many that are only luxuries, the price we give for them ~~or~~ if we sell the ~~product~~ we get is all regulated by the quantity offering in the market and often the probable abundance or deficiency will regulate the price. Now just at present there is a deficiency a short crop and supply in the labor market as the member has called it a dearth of laborers and perhaps an excess of ~~some~~ agricultural products but labor is now so high and the very fact of men giving remunerative wages has a tendency to bring the labor of the world & our country the Irish the Germans and even the semi-civilized Chinese and Japanese have become excited about this land of China. Now while the upward tendency of labor is outside and beyond the control of Capital

as the employer so is its downward tendency not to be affected by any course the employer may pursue. All strikes on the part of laborers for an advance of wages in the end invariably work to the disadvantage of the employed; & all conspiracies and combinations on the part of Capital to degrade and depreciate labor will finally fail to make that Capital more secure or to pay a larger dividend. In our country there is a wide and distinguishing difference as to the prospective future of the laborer as compared with other lands. In the old world the laborer of to day is to be a laborer for life. In our country the employes of the present will ~~very soon~~ in the future most probably be an employer. Our interest (as employers) will in every sense be promoted and advanced by encouraging and inciting our farm laborers by placing before them a bright future to be gained only by faithfulness. I have with the affirmative often been imposed upon and swindled in labor. But is charged a large price for a very small ~~quantity~~ of labor. But if I permit the same person to abuse my confidence a second time I can have no cause of complaint.

Mr. George Still from the opening discussion we have learned that it is more of importance to stick to the positive than we had supposed, and we are led to believe that the negative have not comprehended the issue in the question it is a question of simple comparison. But before we make that comparison would just answer the doctors encouraging prescription. Have no doubt be learned in his practice with patients troubled with low spirits the importance of this kind of treatment. But so far as facts and experience go. The exorbitant prices which labor commands does not work as an incentive to industry faithfulness or fidelity. But in very many instances seems to work an injury to those who get these exorbitant prices making them indolent faithless & after-agent

we said this, but a question of comparison is matter of figures in dollars and cents I have here taken from my farm book statistics and by some such facts as I have here should ~~be~~ come to a conclusion upon this question of labor. Commencing with the year '82 had a good hand for \$12 per month 8 months board \$48 per month \$64 making board include for 8 months \$160 the price of wheat \$1.25ct per bu corn 66ct oats 55ct took to pay his wages and board \$26 bus wheat or if paid with corn 244 bus or of oats 291 bus we next take the year '86 wages \$20 per month and including board for 8 months \$240. price of wheat \$2.75ct per bu corn 80ct oats 75ct to pay the labor for his 8 months of service required 87½ bus of wheat or if paid in corn 300 bus or of oats 312 bus now we have taken the year '11 and we find labor demanding the same liberal tenant price but it did at the close of the war \$20 per month or \$240 for eight months including board - with wheat at \$1.30ct corn 48ct. oats 35cent taking 185 bus of wheat or 600 bus of corn or if you paid with oats it would require 685 bus to pay for 8 months labor and board in 1871. It has always been returned at least in this community equitable and fair farming the tenant doing all the labor and getting half the crop, let us try the running up by this rule a hand will put out and land 12 acres of corn and the same of oats with an average of 20 bus per acre this would make 240 bus tenant share that is 240 bus corn at 48ct \$96 240 bus oats at 35ct \$84 plus the land by \$20 for extra work in harvesting making but \$200 leaving you \$40 worse off than if you had farmed by tenantry leaving out of question all that the tenant is required to furnish in the way of light team implements and threshing so try it by what rule you may farm labor is too high for the price of farm produce. But when you come to the median engine of a blacksmith his price for horse shoeing

\$4 per Span informed me he could easily in the short days that three Span making the two expenses does not exceed \$1.50⁰⁰ per Span or \$45⁰⁰ for the days expenses leaving him clear \$75⁰⁰. That is the farmer must give him 18 $\frac{3}{4}$ bus of corn or its value for a days labor take the article of farm waggons in 1862 the price was \$80 and it took 105 bus out to pay for it. The price now \$125 and it takes 293 bus of oats to pay for it.

Rev. J. Ashenhurst has no statistics and would be be willing to use any that would have a tendency to make difficulty between Capital and labor or cause disagreement and illfeeling between the employer and the employed. The history of the early settlement of Virginia is on point it will be recollected that the first colonists were of the male persuasion after struggling along for some time under the bachelor delusion they held a meeting and resolved that women were a necessary article in the settlement of the new world, and they made arrangements to secure some of them (with them) scarce commodity. So Capital is necessary for labor and labor is the loss that Capital uses for its benefit and to run its heavy burden. The operative has resorted to a course of special pleading which if carried out logically would be to acknowledge that they have nothing upon which to base an argument. On the opening the member could make money at the present price of labor if he could get hands that would do the same amount of work that he does. But this course of argument does not seem to suit his case his confession and proposition do not harmonize. And to get out of it he brings in a fancy farmer one owning 80 to 100 acres and fancys the poor fellow sick and not able to work and not satisfied he burdens him with a sick wife, and I do not know how many babies (believe he did not have them sick). But he says the man has to hire his work in the field and in the house. ~~His~~ Bill added to

all this will eventually ~~if not then~~ send this imagination
 farther to the imagination. Now it never occurs
 for once to occur to him that the laborer may get sick
 that his wife may suspiciously be troubled with some of the
 ailments that flesh is heir to. And that they would feel
 badly if they did not have some little laborers coming
 along to cheer them in their old age. And if they do
 not have them it would be very unfortunate for
 the affirmative as the death of laborers would
 still become greater. It would appear to be the rule
 by the statistics of the second number on the affirmative
~~that a man~~ is only live for 3 months in the
 year and that at not over \$20 per month \$160 for
 8 men how a man is to clothe himself maintain or wife
 and even a small family upon any such meager
 allowance is out of range of my comprehension.

D Poy says So the last person that would do or
 say anything to get up a war between labor and
 Capital, wages are not too high for the present
 style of living, but we have become too
 extravagant and as long as we ~~are~~ ^{are} governed
 by style and all the extravagance of fashion
 we have no right to count upon any letting down
 in price of labor the fashion now is that the
 day laborer and his wife and children must dress
 as stylish as if he were a banker ~~the~~ Railroad
 President - To illustrate a gentleman told me
 a few night ago he was a runner for
 a New York firm manufacturers of switches
 and chimneys he told me the firm last year
 sold \$20,000 of these hemp stacks. Now this was
 the sales of a single firm and all others engaged
 in the trade. And what bales and stacks of
 hemp have our ladies been for the last year
 or two. and to what purpose none unless it
 may have been to make them stoop shouldered
 Now so far as mechanics are concerned we have
 not seen the worst in the line of high prices

if any person will look into the mechanic shops they will be surprised at the small number of apprentices in those shops. When I carried on my trade there was scarcely a week and often scarcely a day but what I had application from farmers to take their sons as apprentices. Now farming has got to paying and farmers no longer manifest a disposition to have their sons learn a trade, we are asked to give a remedy for their evil. The best is just to take it Cool for we are all in the same boat. Extravagance and fast living will wear themselves out. and in the mean time we may console ourselves by joining in the song.

This is a happy land and all of us are blest
If one has a pumpkin pie he shares it with the rest
Mr J. Bushnell would not lower the price of labor it is now to high. Labor is that which produces the crops of agriculture ~~the~~ the machinery and implements ~~the~~ use it turns out the wares and goods of our manufactures hence labor is the life the bone muscle and sinew of every thing. Labor is that which should make the standard of value and it should never be made to play second or second fiddle to any or all of its products. price seems to give a kind of dignity to any and every thing labor measured by its importance to society is entitled to least reward (note by Mr. K. Chain lightning is said to be kind to transfer two paper. Trained Bushnell is to glib for a poor reporter cannot do him justice)

Mr. Alex. Hanson his views have changed very materially since hearing this discussion from feeling negatively Now sees very clearly that Mr Smith and Stott are entirely sound and correct in their conclusions. The ~~affliction~~ ^{affliction} throughout this discussion have spalled the physical over the mental ability they seem to want all the rewards and emoluments to go to the machine, while they are not willing to allow anything to the genius and talent that directs. You may take Fiero George

and start them in the world physically equal and they will come out very different, the one with an itching for following fashion and style will never accumulate while the other with a mental ability by which he can estimate things at their true value he will not be caught putting on a tattered to day that he cannot sport tomorrow. This last will in the end come out all right.

The first of these you may even start where his father left with a competence and he will place his father began, perhaps. There are a class of men the more you give them the more they expect you to give & try to help them and say how they will rely solely upon your generosity and cease trying to help themselves; The price of every other kind of labor has its fixed value and its price is regulated so that it leaves a margin of profit to the party risking his capital and furnishing the mental qualifications to carry on the business. This holds good from the miner and the digger to the machanic that constructs the finest engine. All factories are managed upon this system a fixed compensation for a given amount of labor. The government regulates the price of its laborers and servants from the President down to the supervisors of public highways. Now is there any good reason why the farmer should be put outside and left exposed to the cupidity and sharp practices of extortion.

Dr H. Armstrong (would like indulgence for a moment)
The discovery of gold had much to do with settling values it is the standard of all values. And there it is estimated double the amount in the world that there was previous to the California and Australian discoveries. President Joe H. Boyd does appear to him that the negotiators have not had a correct understanding of the question it is a relation one is labor to high for the price of farm products.

W. B. Smith. would thank the president as an
 disinterested umpire for his opinion of the
 discussion. It was just the conclusion he had
 formed. The negative have been expressing for the
 Cause and asking us for a remedy and how
 we are going to help it and even prophesying
 that it will get worse now what is all this,
 it is worse than special pleading, it is an open
 confession that fact charged that labor is
 too high for time.

Subject for next session, Relative profits of
 dairy stock and grain growing. Prof. H. B. B. to
 Joseph H. Lord Sec.

Harvard Club of Permittion to transfer Session of
 Jan 14 1872 For Dr. H. B. B. President in the chair
 B. B. Smith Secretary. A good attendance of members
 the President Dr. H. B. B. being the lecturer for the Session
 Dr. H. B. B. misapprehended the subject upon which he was to
 make remarks at this time as he understood it was
 a question between grain growing and mixed husbandry
 while as read by the Secretary it seemed to be a sort of
 triangular problem a question of the relative profits of
 stock raising alone of dairying as a specialty or of
 grain growing as compared with each other (Dr. H. B. B.
 had prepared the subject and the Secretary had it about right)
 Dr. H. B. B. the mistake was putting him to test without any of
 the appliances of navigation and he believed he should
 be compelled to use the chart and compass he had become
 familiar with. And when it comes to making out
 the relative profits of grain growing as against a
 mixed husbandry he believed there could hardly be
 any difference of opinion the grain farmer must
 of course be allowed the amount of stock required to
 carry on his specialty but would not be allowed to
 make them a source of profit other than their labor

Mr. A. M. M. The president of our club has certainly presented
 us a formidable array of disappointments and griefs that
 are to fall to the lot of the grain grower. He has
 forgotten that seed time and harvest are the only
 things promised us in agriculture. There is no consolation
 for his fine darkness or his downy barometers.
 I have had an experience with these downy barometers
 have to acknowledge that when they get the foot out the
 become threatening objects. But never felt in coming for them
 that I was elevated mentally morally or physically. And
 when a man faithfully binds that kind of stock if he
 is not head of his time in a position of having his
 intimacies with your fellowships than I am not a good judge
 of position. The relation profits of stock raising, dairying
 or grain farming, when we have the necessary data
 is but a matter of arithmetical calculation. I will take
 dairy farming and compare it with grain growing.
 The estimate of dairymen is that it requires 2 acres of
 pasture for 1 cow ~~through~~ the summer that is 5 cows
 will run up the pasture of 10 acres then it requires 2 tons of
 Hay to winter a cow 10 to 12 tons for 5 cows at 12 tons
 per acre would be 7 acres or 17 acres for the summer and
 winter keeping of 5 cows. Now for the average income of 5 cows
 if you are able to make 100 pounds of butter per head you are
 doing an extra business 500 pounds for the 5 cows this at 18¢
 which more than average price would bring \$90, add for
 5 skins' milked calves \$5 each \$25 and you have
 an average of \$115 for the use of 17 acres of land or
 \$6.76 cents per acre. Now we will take our friends
 pointing to the president's beautiful barometers the estimate is 5
 sheep for an acre for summer keep 50 sheep to 100 cows
 it ordinarily requires 1 ton of hay for 10 or 5 tons for
 50 sheep for the winter requiring 3 acres. Making 13,000 lbs
 for 50 sheep for a year. 12 tons of wool per head is
 more than average clip. This at 8 cents more than
 an average price is \$2 per head \$100 for the 50. You
 cannot get an average of 10 pounds per head unless you
 feed some grain and it will require 50 bushels of oats

we call it North 218 leaving a net balance of \$82 for the use of ~~the~~ owner of land for 4 years or \$6.30 cents per acre. Thus we have given an example of the income you may expect from these samples of Back branching dairying and stock raising. The statistics I have given are very near they may be either slightly under or over estimated by the experience of different men but believe they are near enough correct for all practical purposes. We will now give our estimate of the income per acre of the grain farmer. The average of wheat say put at 18 bushels per acre on our own experience have over run this average on 10 acres you have 180 bu. but your land when planted with grain exclusively must rest 4 or 5 years in four in clover which should not be cut or pastured but left to rot upon the ground this would make a deduction from the average of 44 or 45 bu. from 180 leaving an average of 19 acres 135 bu. this at \$1.25 c. per bushel will be \$168.75 or \$16.87 c. per acre if you take down with an average of 40 bu. per acre 160 bu. on 10 acres 4 off you the year of rest 300 bu. at 50 c. equal to \$150. per acre if to acres or 45 c. per acre. Total at \$168.75 per acre or example of dairying would return an ~~income~~ ^{income} of 6 1/2 per cent on the value of investment in sheep ^{husbandry} 6 1/2 per cent wheat 10 1/2 per cent corn 10 per cent horse power, even able to be the property to the dairy or stock business as to failure from frost or other calamity stock and dairy men have their risks and their positions as often as the grain farmer.

J. B. Smith says cannot subscribe to all the statistics of profit Nelson, and would differ widely as to his making land over in four years apart ^{to} although any such course of farming he will find in a few years that he has run into ^{land} ^{and} that his theory of letting a clover crop rot upon the ^{or} plowing it under once in four years is not little improvement over farming continuously that the rest and clover will only benefit the first succeeding crop

And that his labor will become impossible and unprofitable
just about as fast as if he did not choose you
May consult pleasant Agricultural Chemistry or any
other agricultural work upon maintaining the fertility of the
soil. And you will finish but one opinion and
that will be that a system like this would be about as bad
as you could adopt to render your land sterile and
unproductive. So not care much about the amount
in dollars and you take off one acre if you
unprofitable your land materially in doing it. It is
unprofitable farming. The true theory and practice
is that while you are to effect a project, you should
to keep it profitable ~~keep~~ ^{keep} and even increase
the ~~profitability~~ ^{profitability} of your cows this can only be done as
you are situated by keeping all the stock we can
keep well and making all the manure pile possible
in this way we will in the end make the best money
Mr. G. Hott does seem to me that his discussion has been more
to an extent by both the stock raising and grain growing
champions and in what for what it may ~~be~~ ^{be} advance shall
try to pursue a straight line between these extremes. The first
idea we have any account of in history seems to have been a little of
the kind of that branch of agriculture is to try to our animal and
physical well being as our president would have us believe. Cannot
believe that more first appearance ~~in~~ ⁱⁿ that
line. As to their being any tendency on account of following
the plow or harrow to make troops out of our persons
and making a close companionship between our extremes.
Known by a personal experience that it is a very fuzzy
stretch. Have followed these implements since I was able
to follow anything and still say there is a little further
from my heart than you find it as a rule. And a straight
edge would fit me a little closer than it would most
men. There is something in a man's location
as to what is most profitable - up in what we call
the north. It is undoubtedly the most remunerative
for them. But it is very doubtful if it would be
profitable for you. Neither will grain raising ~~be~~ ^{be}

Exclusively answer a mixed farming is the only way we can hope for success and profits. Sheep in connection with grain growing ~~is the best~~ is the best to have from the kind of farming that has paid the best. Know that some of our very best farmers for a few years past have been discarding sheep and now some, these same men are beginning to manifest a considerable anxiety to get back into it again. It is evident that those that held on with some sort of success better than if they had been carried away by either a panic of high or low prices.

Dr H. Armstrong, Mixed Agriculture, undoubtedly the correct system for us parties with large tracts of land would be likely to make more with a speciality, and it would make but little difference in a series of years what kind of stock they would that specially to say run it strong. With ^{myself} remarks as I do not wish to trouble the secretary to report names and dislike still more to read it in the cold and times. D. M. Day, has been highly entertained by the champion of the evening and many of the members are attached succeeding before manifesting a marked improvement in the way of improving instruction. But some have misapprehended the question at issue at this meeting, which raising us a nuisance, charging us because of grain raising and the relative profits of each, we will require this club into a court must send out for witnesses, we send to the reserve for a Yankee note from where the profit is and will tell you without any equivocation that they can only make it pay by charging. Late members of this club doubt Armstrong has told you mixed farming but if our branch alone is to be preserved he would say drop charging and grain growing. His position would be in favor of stock - frequent Nelson would seem to be the only one that can see the dollars in grain growing and you will find upon giving this subject a crop examination that his practice does not correspond with his precept, that he keeps stock and is to sheep to try grain farming alone.

So that either stock raising or dairying and that depends upon the location on such profitable as specialties than grain, and with no stock is the best hold. J. Birchall cannot be the point in the question for the plain reason there has to be a mixed system the stock as dairy men is compelled to raise a certain amount of grain to keep his stock and the grain cultivator must keep a certain amount of stock to do his labor and furnish milk butter and meat for his family - But of one thing we may be convinced by the experience of the past and that is that we have there too much grain farming it has impoverished and exhausted our lands. But since we have not failures in raising wheat and there has been a change of base there has been a marked improvement the land is again becoming productive, and those that are keeping the most stock is that improvement the most marked. The stock men have almost something to fall back upon where there is a problem in the grain crop. D. J. Smith will be one so expertly situated that kind of farming that may be profitable would be impracticable for another there with farms of 80 acres or less are with us about disappointed to be grain producers while parties owning larger tracts may pick it down commensurate to make stock the leading feature. But for every situation stock and grain to make the most should go together.

Dr. J. Green The prospects where the owner has sufficient capital to turn every acre to advantage is it better in favor of the grain grower. Land is becoming to high priced for stock raising. Stock farming implies that in raising a horse he is the raiser from a colt & of cattle they are called his, now in the older portions of our country the eastern and and part of the middle states where land has become very valuable they have found that they cannot afford to rear stock from its infancy (if such an expression is allowed) hence the stock they rear they purchase at very near

its maturity. Take the best wheat land is ^{stock} and a
man can have a large range stock raising
is undoubtedly the thing but when land gets to be
one hundred dollars ~~per~~ man it is equally certain
it is not the thing. But our ordinary farmer average
- ing less than 80 acres we cannot afford to farm
in this way. But we can take an 80 acre farm
and get it farmed even on the shares by putting
half of it in corn and half in oats can
realize \$700.00 for one seasons use or in what
your ~~receipts~~ would be even more. Stock this
same 80 acres as you will want it will take a
series of years to get this amount of income
Mr. Gunt owing the discussion of the last meeting
of the Club has had an injurious effect upon the
Members discussion seems to be the idea and not
to get at the facts and the truth, there is more of a
disposition to exhibit their combative than
to benefit each other by their experience. While
I have no statistics even well substantiated that if
a man should even buy his grain and devote
his entire attention to stock raising the inherent
fertility of soil ^{is} will in the end make the most
profit. Dr. H. Armstrong there is not much doubt
but what the dairy men have been making relatively
the largest profits for a number of years past
But from what I have seen believe their farms
are running down faster even than with all pain
I think they must eventually give up dairying or
at least pursue a different system from the present
for their land originally as good as ours will not
bring anything like the amount of even grass and
when they attempt grain growing it is made a failure.
Mr. A. Nelson the hard labor of grain growing
after been exposed and represented as so formidable
that it would deter any person engaging in the enterprise
if the representations were correct, if you are anxious
to make your living otherwise than by the sweat of
Your Obedient

There are objections to I use the first of these that I shall give it is feared will often prove fatal ~~to it~~. It is an exotic a native of a warmer climate than ours and we have reasonable grounds for fearing that some of our winters may prove to be too fat for it. Then it is a tree this makes it hard to manage and keep in small and tightly bounds. Its redeeming traits are that it makes a rapid growth and makes on good soil a protection more than any other tree or plant that has been used for the purpose. It is well provided with thorns and is all that can be desired to keep stock at respectful distance. Honey locust is another of which hedges ~~are~~ sometimes made it is perfectly hardy an abundance of thorns which it has the bad habit of shedding like the osage it is a tree. The wild thorn perfectly hardy to the meaner bore but of slow growth is of the small tree approximating to the shrub in size is not objectionable. The Crab Apple is another indigenous and hardy of the small tree kind ~~thornless~~ but possessing a thorny stipewick in the joints of its limbs that makes it about as efficacious as though it had thorns. It is of easy cultivation. and I believe it is important that it should be tested. The wild plum is of much the same class with the thorn and crab apple then we have the barberry a thorny shrub makes a dense but slow growth and would be along time in furnishing a protection. The Privet more for ornament than practical utility. The last of the class of hedge plants is the parakee garden rose and I have an opinion that it will prove the very best of the list for village lots and lawns and be serviceable and ornamental is easily propagated from cutting but would have to be trained on wires as we do grape vines. Next we have a class of evergreens that make the best kind of hedges for wind breaks without giving their qualities would just name them Juniper. Juniper. Red cedar American Arborvitae Norway Spruce Black Spruce White Spruce and Amelanchier. I have not computed the cost of living fences this of course would vary much with the material used.

and the skill of the person growing it. In conclusion I would suggest that each member of the club buy a little patch if it is only a few rods and let it be so managed that every tree or shrub that there is any probability of assuming that purpose be tested. A question has been asked as to the proper time to cut timber would say cut it when it is ripe which is from September to March.

W. H. Dyer Fences are just like any other department of farm management & all depends upon our location if we are in the treeless plains and prairies of the Western States then there would be a propriety and even a necessity for our following the suggestions and instruction of our lecture but as we are situated in the midst of this originally heavily timbered country and with thought of it left to rot for generations can see no propriety or necessity for such course. These living fences that have been so strongly pushed upon our attention have many objections. They are expensive to start with then they are a constant source of labor to keep them trimmed and in bounds and when you have them trimmed after the most approved style they occupy more room make more waste land than even the old worn fence. At our farm there is a continual necessity for changes of inside fences with living fences such changes are out of the question, and as long as we can get rails at \$3 to \$4 per hundred the expense is all against the living and whenever the rail and board fences get to costly the we will adopt our ourselves to the circumstances & in Europe where I am from whether fortunately or unfortunately you may have had for thousands of miles without ever having a fence there is no waste that all is cultivated right up to the wagon track. When the time and necessity comes for with our present kind of fencing. We will have become wise enough to select men to Legislature that will enact laws that shall give us the best protection. If the contingency should not occur in our time but in that of our sons or sons-in-law whenever it may. Necessity being the

Mother of invention they will find a substitute
but believe it will never be living fences

Dr H. Brunsong, leave but little to say but have
often felt the pressure of the fence question. The
first query would naturally be cheapness. The second question
believe we have an abundance of timber & last for
generations for fencing and building purposes if it is
judiciously managed. Rail fences are undoubtedly the
cheapest when the sawing of timber is of no consideration
But as far as I am acquainted to make new fences have
adopted Post and board and expect to build that kind in
the future it requiring much less timber than for rails it
can be made at an expense not exceeding 40 per cent
and with good oak posts will last for 20 years and
that will last two sets of post making 40 for the boards
with only the expense of a new set of posts.

Mr A Nelson has not much doubt that about all that
has been said this evening upon the fence question
is nearly all correct as far as they have gone
as far as holding timber is concerned there seems to be
a kind of fixed ratio of retaining 100 acres to 160 as
the proportion to keep intact. Now whatever ^{man} our cleared
land may bring for any well timbered land will readily
command 40 per acre on these acres we of course
have to pay taxes and get barely any income the
interest at 8 per cent on 40 acres with this income would be
\$320 a year. Although I am one that has been
holding on to timber have still often thought that
it is a poor investment. The new fences I have
been building for some years have pursued the
doctors plan of posts and boards. The objection
raised against live fences is for trimming is to
be taken in account it is not valid as it is done
(where they have much of it) by machinery the same as
we do our mowing. with much less of time and
labor than there is required to keep in repair rail or
post and board fencing. That if left a year or
more very materially less beauty the beauty of a country

and from what I have seen in the west timbering is
very apt to be neglected. I believe we are retaining
timber not worth our own mill to use for the interest on
the investment. ~~There is a burning policy~~ Let every
generation take care of its self it is all a folly to
make estimates of a future necessity or contingency
that may never occur.

J. B. Smith says some plans with Mr. Bushnell say-
-toms used more timber by plenty than could be so objection-
-at least experimenting so that we might know what ~~the~~
is best adopted for the making of bridges or living
fences. But so far forth as timber is a consideration
in fencing we certainly have an abundance
to fence our stock in and as to fencing others
out it should not be required of us. The idea
of a special time or season for cutting timber
is all a mistake what is wanted is that if you
wish to use it for post that it be thoroughly seasoned
before you put it in the ground.

what season of the year it is cut the drying makes
it all alike. gave an experience with maple cut
when sap was up and after drying put in ground
which lasts as long as ordinary oak would have
done if used green. as to putting butt or top end
of timber in ground by experiment there is no
difference in their lasting. The doctors plan of
making our new fences of posts and boards is
correct.

Mr. J. Stott the question of fencing is one of great
importance but as far dead or living fences where we
are placed in Ohio does not bear the propriety of adopting
the living? have we been so unwise as not to keep
sufficient that with its increase in growth it will not
keep up our buildings and fences with all needed
repairs and when necessary supply their places with
new material. We should keep a massing of forty
acres to one hundred and sixty with this amount
of timber land the growth will equal all the

mother of invention they will find a substitute
but believe it will never be living fence
Dr H. Machinery have but little to say but have
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sufficient that with its increase in growth it will not
keep up our buildings and fences with all needed
repairs and when necessary supply their places with
new material. We should keep a margin of forty
acres to one hundred and forty with this amount
of timber land the growth will equal all the

the maturity of 120 acres of cleared land. If second growth chestnut in 10 years can will make four posts for post and board fence. As to usage many are told that feed raised in the latitude in which the plants are raised makes them more hardy that they become in a measure acclimated. As with the doctor as to board fences. But the lack of good material for posts is an acknowledged objection the estimate of 20 years for oak is to high much more than the average durability 13 years for oak 25 for second growth chestnut 50 for locust and 100 for red cedar is said to be the average of these different timbers. To make post and board fence will not require half the timber that it does to make of rails and should not cost to exceed 25 per rod.

Mr. J. Bushnell. have been pretty well pitched into for recommending living fences and in reply would say that whatever is worth doing, is worth and should be done right and we should look after the interest of the coming man.

Rev. J. J. Ashenbust would like a remedy to prevent posts becoming rot.

General members said at once underdrowning. Mr. S. Ewing there is very frequently mistakes made in not setting posts a sufficient depth they should not be set less than $2\frac{1}{2}$ to 3 feet in the ground is favorable to make fence with boards up and down they are hard to climb and not so liable to get picked off on this account. thinks fencing one of the wisest branches of farming. should retain 10 acres of timber to 120 of cultivated land the growth of timber will keep pace with our requirements with this ratio. Mr. T. S. Corahill is even an enemy of fences in every shape that they can be presented. it would be just as reasonable to require a man to be to the expense of carrying weapons to defend himself against assaults from his neighbors.

As to denying the expense of fencing to keep his
 neighbors stock from ~~trampling~~^{grazing} upon him
 no kind of stock except, should, be what we call pasture
 you can by doiling keep as much stock with
 12 acres as you can on 25 to let that stock run at
 large on your fields. (Mr. Grubill was explained by
 such expressions as that it you are right, that he declines
 after Mr. Boyd The time is coming when there
 will have to be adopted some other system of fencing
 than that we are now using for you can readily
 find on oak that does not present the evidence
 in its dead branches that not only has it ceased to
 grow but that it is on the way to a rapid decay.
 I am at a loss to understand the members Smith,
 Stoll and Ewing when they talk of the growth of
 their timber keeping pace with the requirements
 with our oak timber I would only be a matter
 of time and that not a very long one even if we
 should not cut or use a tree till we would have
 none. We that have oak land are compelled
 to cut more or less of that kind of timber every
 year to prevent its loss by decay, and for this
 reason it is not worth while to try even as an
 experiment any other kind of fencing as our dying
 timber will give us even a surplus over all need
 repairs. The service and lasting qualities of oak
 post has been much better for us than the statement
 of some members would lead us to expect we have them
 that have been in use 21 years and many of them
 are good still. We cut for post in the winter
 before the bark is first cut off ~~the~~ better than higher
 up on the tree as the nearer the top the less
 valuable

Question for lecture at next session Underdraining
 Lecturer Abram Ewing
 adjourned to meet this evening week

Farmers Club of Vermilion Township

Session of Jan 30th 1872

Wm J. Ashenbush Chairman presided W H Scott Sec
a fair attendance of Members

Question for discussion understanding & best being
lectures. Mr. Lewis has no doubt but if we appreciated
understanding as we should, that it would no longer
be theoretical with us but we would practically ^{know} some of
its benefits. I am not prepared for want of that practical
wisdom required to make us conversant with questions this day
to give a lecture that is likely to be either instructive
or entertaining for want of personal knowledge in
the matter of its profits and advantages will have
to draw upon what little I have read of its benefits
and rewards that others have realized from pursuing
a thorough ~~and~~ system of them preparing the soil to
obtain the largest possible returns in the amount of its
productions. The limited experience I have had, will give
first. My first attempt was with a swampy patch in
one of my fields dug my ditch filled partly with
cotton stones thrown in carelessly allowing them to find
their own location filled up with much of them
up in digging the ditch. The sequel was a failure
there was no benefit for even the first season if
there was any openings for the water to pop up the
Muck stems to have poked them up at once. My second
attempt was with a spring that made some waste
land by spreading over the surface having found a
little by my failure. in this second run I laid a
row of stone along each wall of the ditch and over
^{top} another of fat stones leaving an open space in the
center for the passage of the water. this had been
successful for a number of years, and my impression
is that to make underdrains to be of any utility
they should be so constructed that you should be certain
of a vent or opening sufficient to carry off all the
water that may push its way into them another point
that should not be overlooked or miscalculated, is

a sufficient continuous fall and the best ^{way} to obtain this by commencing a dry ~~ground~~ ^{drain} at the lower ~~end~~ ^{end} and with water or level keeping a regular ascent as far as the section of the ground will admit always guarding against any entire levels even for a short distance for whenever they occur they make a resting place for any sediment of clay or sand and by their accumulation finally destroying the purpose of the drain. As to the advantages and profits of underdraining have no personal experience, but have assurances from so many sources that there is no room to doubt or cavil of the remarkable paying results. And that whenever we may attempt anything in this line, if we do it in the manner that experience has taught to be the most harmonious and effective, we may feel a confidence that is not ^{an} untried and doubtful employment of our labor and capital. And that in extra yield of crop we will get back often in one season and more longer than beyond all expense. And that this source of increased income is not transitory lasting for only a few years but will be continued ~~down~~ ^{down} us and to our successors. While in the language of John Jayson of Geneva New York there is no tillable land but what it will pay to underdrain if this is a correct statement made by the father of underdraining in the United States. There is scarcely a farm but has places of depression where the water stands low and being spots on which the effects of underdraining ^{will} be the most marked. Such ~~and~~ places are often valuable for farming purposes not even producing nutritious grapes, but when the water that stands on the surface has a running current beneath, it is when thus dried off almost invariably the best land upon the farm. Not even on what is called dry land crops are very generally increased from two to four fold over their ordinary productiveness by a thorough system of underdrainage. To make special drainage it appears to be very generally agreed that tile are the only reliable material and when

durability and adaptability are taken into account
and the ~~object~~ ^{object}

Mr. J. Bushnell. I have been well pleased with the
lecture of the evening do not know how it could have
been much improved, even with the largest assistance
to help. And it certainly was a very clear sound and
correct one. Statement of the lecture that on almost all
farms there are places which are worthless to the owner
so far as crops are to be taken into account. Yet they
are the very best land upon those farms. When freed
from the grasp of their watery King. Swells and
depressions where the water finds a level have been
receding along with the water for past ages the
rich fertility of the surrounding land that inclines
towards them, eight years ago commenced with
my first experiment with 6 acres which I dug about
to put a nursery with plow and spade. I made one
~~drain~~ in this I used timber putting a piece along each
about the thickness of an ordinary rail over this laid a
wider piece something like an old fashioned pondstone
to this I made five laterals then I filled to the
depth of about one foot with cobble stones. Cultivated
my trees upon it without any annoyance of surface
water this stock being disposed off and changing
my nursery to another field, have had these 6 acres
in corn for the two last seasons, both crops have
been remarkable good ones. I believe double any
previously raised upon the same land and the drainage
is still complete. My second attempt was with my cellar
it having a hard pan bottom made a splish narrow
field water just as though it had been manufactured
for the ~~drain~~ purpose. I drained it first in the
ordinary way with a horizontal drain, ~~the~~ ^{the} Norway
rats being an undermining sort of little people
played off their low tricks upon my drain. And
I had to acknowledge beat on that style of drain. I
Then made a vertical one down to open rock
filled with cobble stones to within a foot or two of top.

and finished up to level with coarse gravel and we have had no trouble since. In many places this kind of drainage could be practically applied in our fields where there is open rock below at not so great a depth. In my vineyard of eleven acres I have to drain much with tile they have been a success - have another made through and from a boggy piece of ground partly stone and balance tile and it is giving entire satisfaction. And in this case a row of stone along each wall of the ditch and another of flat ones on top. I would briefly state the advantages of underdraining first those swail and marshes when reclaimed give their own evidence in its favor, second what is usually believed to be clay land. the season on it is much lengthened by the ground drying off so that it can be plowed from one to three weeks earlier than you could if it were not underdrained third the land never becomes so dried by frost lying on the surface until it crumbles and for this reason the soil becomes more friable and congenial for every kind of grain and will get much larger crops.

Fourth crops upon land thoroughly underdrained are not liable to be winter killed either by burning or scaling out, and the severity of spring frost is materially modified.

Mr. A. Wilson so far has no experience any place being of that kind. that no artificial continuos are required. to relieve it of excess wet. Having a greatly subsoil material already porous enough and if any thing too much so permitting the sun's rays from manure to break off so that the crops are not liable to get all its benefits. In our talk about underdrainage there is another important matter that may be overlooked. Now I do not wish to be understood as saying one word to discourage this part of good farming especially upon clay lands that crop culture I believe to be branch of our farming the importance of which is much underestimated.

and particularly subsoiling, now it is not to be recommended that where we have been plowing but 8 or 6 inches deep in the past that we at once turn up the soil to the depth of 12 or 14 inches but that we make it a progressive work going from 8 to 9 inches, ^{then} 10, 11, every plowing in this way the top and lower soil becomes thoroughly mixed and alike productive and if you can in any way obtain a producing top soil of from 15 to 18 inches it being porous will permit the water to settle and leach off and answer the purpose of underdrainage on most lands. And I have an impression that if there was more of this kind of plowing done there would far less necessity need talk about underdraining. But still with deep tillage there are many farms that have parts of them of such a nature that they can only be reclaimed by underdrainage of such a class are all heavy stony downy slopes and swails

After Mr. Armstrong this is my first attendance for the winter since I have missed a source of consolation and instruction in your new feature of reporting the remarks of members. The question of the evening is one that in practice I have had no experience and any opinion from me could only be regarded as guess work.

Mr. G. H. Hoy farm has so much stant in its surface that underdraining does not appear to be necessary, and it would be a useless expense to do it. But this is not the case with all the land in our township and several members of this Club have land that I have no doubt but if they would do some of this kind of work upon them it would be for them a paying investment. There has been so little ^{done} done in our community that our friends must be guided by the experience of others. The oldest experimenter in ^{the} John Johnson of Geneva New York

it is nearly or quite a half century since he commenced with a farm on with his predecessor could scarcely make a living not being able to raise on average more than 8 to 10 bush of wheat per acre and 15 to 20 of corn by complete drainage of this land. Mr. Johnson brought up his crops of wheat to 30 & 40 and corn to 60 & 80 bush on an acre the first crop in some instances paying first cost of land and ^{expenses of} drain improvements - Now in the construction of drains it should not be done as though it was a mere temporary work that in effect to last for a season or two as there is no end to their benefits they should be constructed just as we do our buildings and made as near indistinguishable as we have the means. A large per centage of all the drainage in our township are open ditches these are made in ^{most} cases as the property belongs, they are the most economical and least expensive, even this taking into account all contingencies they are mistaken. The expense of digging and underdrain ~~can~~ account of wealth does require more than 1/2 to 1/3 half the expense for labor and the expense of tile and will not come to much if any over the expense of the open ditch and ^{then} last there is always more of best land sold this is the expense of keeping them open and underdraining is the most economical.

Mr. J. S. Grubill With the present low price of land and high price of labor I have some doubt as to the profitability of underdraining ^{our} entire farms or even whole fields take down a little of it in spotsy places and save that good, ^{where} before it did not get back even the amount of land sown. But I have learned in my little of experience that we have to exercise care to make them what they should be.

Complete surface dryers. I made a drain from
a piece that was always wet. Made it
straight through the wet part which was expected
for most of the piece still at the upper end
the water rises to the surface and I should
have made a header or crop drain to
conduct the water into the main I have
not had an experience that would warrant
me in giving any advice as to its profitability
for an extended and thorough system.

G. W. Rogers I have listened to the remarks of
members of the Club this evening, with a great deal
of pleasure, as they gave evidence of an intelligent
papered by these members about the question of
underdraining that they will eventually put in
practice what they know at present only theorizing
about that knowledge being the advantage and profits
that others have derived from "system of complete
underdraining". It will work its self out in this
way they have all found the necessity for
swales, swamps, and spongy places, and in making
drains from these they will often have to make
them through what they now estimate dry land.
But they will find on this seemingly dry
land that the improvement is so marked
and visible that they will give all their land its
advantage. It is good for wet land it is
good for dry, and is just as necessary as the
veins and arteries of the animal system
of joints in looking over my book that I have
carried 14 two horse loads of tile and have
made a considerable amount of stone drainage
and my opinion is that stone does not answer so
well as tile unless you have a good amount of fall
and even in the most favorable, I would not
make of stone unless it would be to get them out
of the way. Consider them more efficient than tile

taking into account the extra and hard labor required for stone and do not believe that they are as efficient and durable. There are other materials that have been used for the purpose of underdraining. Some have sometimes been used that answer well for a number of years others have used timber and iron springs or pipes where it is continuously wet ~~they~~ will last for a long time. But for durability and utility tile is the only thing yet adopted or used that comes up to the standard of perfection. In these meetings of our Club, when our experience is given we then get the true test of the worth of any improvement. My first experiment was with a low piece of ground or depression in a field where the water collected in a wet time, in the spring it would be covered with water and then dry off in the summer and by fall would look as though it should bring a crop of wheat. The person from whom I purchased said they had always sowed it but had never got any crop except a sort of wire grass that was worthless. And it gave me the same kind of return for my seed and labor. But after underdraining which I did with stone it has given better crops of every kind than any other part of the field and it more than paid the expense the first crop. This my first experience is about a fair sample of all that I have done since so far as property is concerned. And I tell you gentlemen that the farmer that is neglecting to underdrain his land, he is saving at the Spring and wasting at the busy he is penny wise and pound foolish. And, may I add plow deep and even subsoil as suggested by a number important things in farming but they can never supply the place of underdraining.

Secretary gave notice for an election of officers at next meeting.

Question for Capt. Capron. Insects injurious
 Mr Henry McQuillen. Do these
 the farmers, adjourned to meet ~~then~~ one week

Farmers Club of Vermillion Township
 Session of Febry 6th 1872
 Dr H. Stronburg Vice President in the chair. Address by
 Mr H. McQuillen read the following paper.

The benefit we derive from insects are few and far between. On the
 contrary the injurious that the farmer suffers from them from
 time to time, and not various ways are harming greatly more
 against a familiar acquaintance with an insect, a mouse and
 all this formed and disguised, would afford us much help in the
 discovery and proper application of the remedies for their
 destruction. Insects would have their appointed tasks and
 we would see the performance of them. They are exposed to
 many accidents through the influence of the elements, and they
 get a prey to all kinds of birds. If it was not for that, not so many
 short time we could not save anything, nor could we do at all.
 For when by numerous interferences with the planing society,
 we neglect the very measures contrived for our protection. If our
 birds were allowed to increase and multiply as they should we would
 not be bothered so much with the East worm, tent caterpillars and other pests.
 That the farmer is his acquaintance, instead of protecting them, seems to
 be laboring for their destruction. He goes forth with a banner on
 his shoulder to see them away, away, away, and then, most likely
 a very few at that. For as I believe they take the honey, as much for
 the worm as they do for the honey, I am drawn on that killing border.
 I believe that insect short hand, just out of your mind. They have
 done it here, and with their willful hands, they have done it
 and destroy their young. If I had any way now, something what I
 consider the best exterminator, I would give him ten dollars for every
 bird he killed, or put them where the dogs would not take them. I believe
 that we ought to look on birds by example as well as by power. We
 regard the beautiful birds as our friends, and think them to be
 defend and even feed the birds before us. That our legislators

ought to pass strictly low for the protection of birds. Raging gumpardon
 for their destruction, I will now return to the insect. Deprived of their natural
 food by the arrival of forest fires, charcoal and the other indigenous plants
 it is now around the soil, they have now no other resources than the cultivated
 plants that have taken the place of the original vegetation. The destruction
 of insect eating animals, whether quadrupeds birds or reptiles has doubtless
 tended greatly to the increase of insects. Colonization and commerce
 have to some extent introduced foreign insects and on account of this they
 were before unknown. It is to such causes as these that we are to attribute
 the unaccounted appearance, and the constant multiplication of many insects
 on our cultivated grounds, and even in our cities houses and dwellings. The
 learned seems to believe that many absolutely new insects are generated or
 created, from time to time. To understand the relations that insects
 bear to each other, and to other objects, and to learn how best to check the
 increase of the various kinds, we must make ourselves thoroughly acquainted
 with the natural history of these animals. The subject we think is
 important to all persons who are cultivated in agricultural pursuits. But
 insects and the causes of their loss are subject to very great changes of form
 attended by equally remarkable and new habits. These changes or
 transformations, might cause the same insect at different ages to be
 mistaken for as many different animals. For example the Caterpillar
 after feeding upon leaves till it is fully grown, rises to some place of
 concealment, casts off its caterpillar skin, and presents itself in an
 entirely different form. One observes it has neither the power of moving
 about nor of taking food. In fact as this its second or changed state,
 the insect seems to be a lifeless strong cord or twisted body, without a
 distinct head or movable limbs. After resting awhile, an inward struggle
 begins. The chrysalis skin bursts open, and from the end issues a butterfly or
 moth. The little fish like or eel like animals that swim about
 in a green slimy barbell or stagnant water, soon come to maturity, cast off
 their slimy skin, take another form and which they again collect up like a ball,
 and either float about on the surface of the water or of submerged subter-
 ranean their bodies and which over and over pass one side of the vessel
 to the other, in the course of a few days. The little water tortoise ap-
 pears for another change. The shell splits on the back. The head body,
 and limbs of a mosquito suddenly burst from the opening. The duck
 laid fast on the empty shell. The little water jar with water and mud.
 When the insect abandons all water element, it is not to be long before

and flies away, seeking shelter to seek hunting for the blood, when its
coloring is as red as blood, it has been for a while now called "blood-sucking"
It is our hope for the sake of our eyes of an insect more or less distinctly marked
by changes in the form, power and habits. After making the last change
from a chrysalis to a winged state it no longer increases in size. It lives
at least but a very short time. For most insects die immediately after
laying their eggs but Entomologist of Massachusetts has ascertained that
there are 1200 flowering plants on that state. This includes every
kind having seed and the every plant & variety of insect & rather is
insect to every plant. Making a total of 4800 species of insects that
do not do life injury. But we think there are but a few varieties that
do. & many serious damage here are Wheat. I have from which we
suspect the most numerous are the caterpillars. Lesser Apple tree, hawthorn,
Rosa, etc., Thistles, Gooseberries, &c. remember and don't forget some
of these, I will now proceed to give a history of hatching pupae.
According to the best authority, and also way I understood it. First
we find of caterpillars, we will take up the Caterpillars. There are no insects
which are so universally destructive as the caterpillars. They are the young
of the Moths and Butterflies. There has been discovered and named
by Latham's pupa 1771 kinds. One female will lay one or two average
200 eggs before they die. Supposing we had in our orchard 200
female caterpillars. They would lay eggs and produce. If nothing
happened or destroyed them 200 000 young. You will see by this estimate
how fast they will increase, if you do not help the birds and insects to
destroy them. The greater part of Caterpillars subsist on vegetable
food and especially on leaves of plants. Hence their injuries to
agriculture are enormous, and are too often joined upon our vines.
They usually change their skins about four times before they come to
their growth full length. They cease eating and prepare for their first
transformation. Most of them at this period spin around their
body a sort of second or second, and to which some introduce the
head of their bodies. Some merely under the earth to burying their
chrysalis. But I wish to speak more particularly of the common orchard
Caterpillar. Its first larva are those orchards where they have been
sufficient to send f. a succession of years become perniciously od-
oriferous because of the the efforts they are obliged to make to repair
at an unreasonable time, the loss of their foliage, and therefore
unprofitable and consequently unprofitable. But this is not all

insects spread in every direction from the base of the
 candle and incident to those of their earliest neighbours. They were
 not receptive for long duration have been polluted and even mounted
 but have failed to colonize them. They taking on shell or sponge and
 salivate at with some kind of cheap oil, and thrust it in the nest when
 they are all one it, with hell flames, without any of the kind, or the
 better way would be to pour the oil on them. From the first to the middle
 of June they began to leave the trees, separately from their companions,
 wander about in holes and finally get into some narrow or other place of
 concealment and make their cocoons. From 14 to 17 days after it appears
 as the middle of June - a dark brown with the general appearance of
 the males. In July they lay their eggs, resembling the spotted tobacco
 preferred to all other. These, go into pairs. The eggs are placed
 around a tin of, and covered with a coat of brownish water proof varnish.
 They remain there until spring when they hatch. The sometimes
 find another kind of caterpillar - on our Florida woods - said to be present
 by some people, but we think it is doubtful. It is very common and
 there is not much danger of any one doing that. About the last of
 August it attains its full size, which is about 3 inches long and the
 thickness of your finger. It has become into the ground in a pair
 days becomes a chrysalis. Some in that form till spring. When it
 changes into a very large dark butterfly. The first way to get rid
 of them is to cut them off by the root with a sharp knife and
 with the best of you. There is another kind of caterpillar that is very
 abundant in the garden and by the roadside. The first is a
 caterpillar. I suppose that it is not a member of the class but that
 has changed its brown in trying to get rid of that common, pale green
 coloring of a cut worm. It is old on the place of the big blackberry.
 The day, at night, brings forth his mean little and puts it off the
 corn and drags about his hiding place. There are several kinds of
 these worms but so closely resembling each other, it is hard to tell
 them apart by the naked eye. The Revised and Entomologist of Texas had
 had a lot of these cut worms, supposing them to be all of one kind. He put
 them in a box and kept them till they changed to moths that he was
 surprised to find five different kinds of moths - but I do not know.
 They most of cut worms change to chrysalis before they change to moths.
 It is most likely that the most numerous cut worm we have
 has changed to a moth without first becoming a chrysalis. The

A member of the 'Society' was of the place
 that sent over his body and bills at his house.
 Another of the members wanted to hear of the monster
 'Society' making his former look so 'angel' place.
 By eating off his corn it proved him to be with
 'Society' and troubles it some in his path.
 These bother him in daytime, and baffle at night.
 But members of the 'Society' we must valiantly fight.
 The insects that bother us with all their might.

Mr. J. Bushnell distributed among the club plants of
 apple seedlings of that year's growth part being perfect
 samples and balance near what was the surface of ^{the ground}
 as they stood in the nursery was covered with a knobby
 excrescence enlarging the circumference of these affected
 plants to full double the size of the perfect ones.
 Mr. Bushnell said this fungus growth was caused
 by a very small insect hardly as large as a ^{Worm} ^{moth} they said
 they are known as the woolly aphis when examined
 under a magnifying glass they are found covered with
 a woolly coat or skin hence their name they are
 blown over our fields and orchards and are not
 distinguishable from dust when they are thus carried
 from place to place (a member inquired if they damaged
 the trees) They render the plants they attack worthless
 for nursery stock ^{Practically} I lost at least
 Ten Thousand plants out of a hundred thousand
 the past season they have been here than I have
 known them before and if ^{there} ^{was} not for their destruction
 I could afford to sell grafted trees for 10 cts ^{with} no
 much profit as ^{now} realize at 25 cts. The outbreak certainly
 is a bitter bitter insect that ^{after} doing serious mischief to
 our fruit trees and unless we pursue some course to destroy
 them they will eventually make fruit growing a thing of the
 past the first thing in the program to get rid of this
 pest would be to cut down every wild cherry tree in
 the country have cut down all upon my place and not
 despair expect to commence on my neighbor's apple when it gets

through with his will give forced all Indians a town (A. B. C.)
after you get through with them & if you will give them
the same benefit don't want any hostility (C. B. C.) all right

Dr. J. G. (you) are not much wiser in the science of blinding. Some parts of the vision still appear to hinder one another, which all parts are well defined and understood that part in which, "lack knowledge" and the most important one is how to protect ourselves from harm by the insect pests have not much doubt but harm and the ingenuity of man will, that and perhaps the best protection and that the coming man will be able to wage a successful warfare of extermination, we both in managing and heading the insect tribes is there wanted perhaps one single female being sufficiently productive to produce hundreds of her kind. Then their great instinct is much in their favor. The female is not content with merely keeping her eggs ^{but} ~~put~~ over them like out of reach that render them safe from the elements ~~and~~ ^{thereby} laying them upon leaves attach several leaves together by a web and even if the leaf should become detached from the tree it still remains suspended by this web. Take the god or boll fly it never makes any mistake in placing its eggs on parts of the horse that he cannot reach with his mouth placing them upon the fore legs and flanks. There are not only an immense number of individual insects but the different kinds ^{are} ~~are~~ numbered by thousands that keep them at work in various states and to study the habits changes and transformations of all these would be the task of a life time but the weight he designed and brought within a compass of 700 chapters and in this way we would be enabled to more fully ^{in detail} ~~comprehend~~ and master the subject. However are now a horse in the great barn suffering more from these little parasites than from all the horses. In one year alone the farmers of Ohio lost more than one million of dollars of their harvest by the field mouse. The cut and grub worms. Blat and squash ~~and~~ and the new Colorado bug are formidable or soon will be to any farmer by the life they cause him

There is no subject with which the farmer has to do that requires so much of study as does this one of pest ^{the} insects from the ravages of the insect tribes, and should ^{you gladly} call to his aid all that science or experience can impart for his instruction. John G. Z. Stoddard. Has never studied the science of entomology. But, would be a very bad case for the insect tribes if there should be nothing good about them one thing I should teach, how very small we are with all ^{the} boasted science and knowledge, how our towering insects surpassing life and to very small that they may be mistaken for the dust of the highway yet they are capable of doing the farmers gardens and fruit orchards damages costing up millions of dollars if it was a lion in our way we would know how to meet him. But here are creatures seemingly beneath our notice yet the worst as to acknowledge better and we can only fold our hands and let them proceed with ^{the} destruction of our property while we have among insects depredators and enemies we have or friends the scavengers that destroy much that would be a cause of disease and not only so many kinds prey upon those that would injury to us. Dr. Henshaw has said much about the instinct of parasites. This book has an interesting feature though to me an offensive one in ^{the} disregard my Clinton worm was the only kind damaged by the leaf girdling insect and the young here ^{is} that ^{the} ^{the} Clinton worm all other kinds and I find that this experience ^{is} general over the country.

Mr. J. Stafford while I can but regard myself as among the ranks of the chub will lay a few words upon the gad or Bot fly are prompted to make their remarks from the misperception of its nature and the consequent malpractice often inflicted on horses in consequence of this mistake. The gad fly deposits ^{its} eggs upon the face legs and flanks of the horse he licks them off and they pass into his stomach. They attach themselves with two small hooks to upper end of the stomach and live ^{and} grow upon the tissues of the stomach they remain in the stomach for about ten months let go their hold and pass off with food about the pick of August bury themselves in

the ground for two or three weeks come out shed their skin and are again the gad or bott fly this is their course now the question do the ones do harm to the horse or his stomach. I answer no never as long as the horse's stomach is healthy. Every horse that is not kept stable during the season of the gad fly, has bottles in his stomach and if they produce injurious effects upon all that have them would be alike sufferers and it is only when the horse becomes diseased by inflammation or other cause and the ~~unit~~ movement of the bott becomes unnatural that it ever changes its location until its season of natural change. I feel that this is a question that farmers and horse raisers should be set right on as I believe there is tenfold more injury done in declaring for Botts than ever was done by the Botts. one other suggestion they are so situated that even if the skin injure the horse they ^{are} out of reach of any medicine you could administer - and again if you could reach them they are so tenacious of life that any medicine that would kill the Botts would kill the horse much sooner than it would them. I would finally say to the club never give medicines for Botts.

J. B. Smith, Esq. & at one occasion was treating an animal that he had ^{just} died upon opening it found a host of botts detached in his stomach upon another occasion had a sick horse & said it was botts and recommended sweet milk and molasses I gave him the prescription and got well.

§ Prof. Bagg was not present to hear the reading of the minutes ^{from} an interesting feature of our meetings have been highly entertained by our St. Quintens affair on insects but felt that we have to large a question for one evening believes that some one kind taken single would enough for one discussion as far as Mr. Stafford has addresed us upon the gad or bott fly I would endeavor any word he has said that never do harm to the horse when in health now are they ever the exciting cause of disease

An election was held for officers Dr H. Armstrong

President Mr George Stott Vice President Rev J. Y. Ashenbush Secretary

question for next session

The cultivation of our intellectual Moral and Social natures essential to our highest enjoyment as farmers

adjourned to meet in one week.

Haydenville Chas. February 12/73.
Farmers Club of Haydenville Township, Section
of Oct 12/70/73. Dr. H. Armstrong President in the Chair
Rev J. C. Ashenbush Sec. being absent, A. Nelson
was appointed in his place. Rev J. C. Ashenbush
(the lecturer of the evening, being absent. Dr James
McCorm was appointed by the President to deliver the
lecture of the evening. Dr. McCorm says ~~amongst~~
we are delighted and greatly have just left from the
village and surrounding neighborhood, to impart to
us ~~valuable~~ information from one another with regard to
the cultivation of our intellectual, Moral, and Social
natures, as being essential to our highest enjoyment
as farmers. But all my observation in the United States,
and successes of farming, I think while many farmers
fail for want of capital. Many more fail for want
of a proper knowledge of farming. I know a farmer
who bought 80 Acres of land and failed to pay
for it. And another purchased the same land and
had ~~one~~ money enough to pay for ~~the~~ ^{only} the price of the purchase
money, and paid the balance cash. Showing that one,
with knowledge fits him for successful farming. Another
farming is a success. While he who lacks the knowledge
makes it a failure of it. Says farmers depend too much
on the physical & the little on the mental. They consider
muscle cheaper than brain, consequently striving to use
all they can, they use the muscle - Farmers should

Should spend at least one third of their time in cultivating the mind. Knowledge is a good thing, which ignorance is to be deplored. A noble philosophy seems to exist in the Club against book farming, if we had all the knowledge of the past, is concluded that we could grasp it at once, and put it in position, we would be very much benefited by it. Agricultural science lies at the foundation of all science, and should be known and practiced by all men. Farmers should make his farming pleasant and profitable, study the science of farming one third of his time. Moral farming consists in truthfulness, sobriety, honesty, and in being kind and genial to his neighbor. An honest man is the noblest work of God. When the son, let him be what he may himself, who is not proud of saying (showing), or in hearing others say, he had an honest father, when the father who is not proud, and his heart begins to know that when a truthful honest son, every farmer should not only educate and honest himself, but by precept and example impart it to his sons & daughters. As moral men, he should be more social as farmer. The full exercise of our social nature stands plainly, but most prominent as the natural year which the farmer enjoyment seems, let world urge upon the Club the importance of improving our minds & moral, & cultivating our social nature, as the way by which we can reach our highest enjoyment and wisdom -

J. D. Smith Esq. says, Society of all kinds depends for success on the improvement of our mental and our moral nature, and progress better by being honest and moral. They say, and say nothing - I have been deep, and find a much larger profit than shallow plowing, the book theory & the contrary notwithstanding. Mentally our present success not reliable, but know more of good sound common sense, which experience has taught them lessons of wisdom which have placed them far above many of our scientific men as good counsellors.

for farmers - Farmers should take the best lights for their guides, whether it comes from spiritual power or from good sound common sense practicable men, thinking it important for all farmers as well as all of every profession or calling to cultivate their intellectual, moral & social nature, as suited to our highest enjoyment.

Mr. George Stoll says the farmer has a mind an intellectual, social & moral nature, susceptible of comprehending, capable of improvement and always ready for enjoyment, and in order to reach the highest degree of enjoyment as farmers, this part of our nature must be cultivated to the highest degree - by the cultivation of the soil aside for one evening, and confine ourselves to the question. We have talked publishing, printing, circulating, deep & shallow plowing, and this volume has led us to a better theme and talk about the improvement of our intellectual, moral & social qualities, for who but have seen things which demand our attention and cause wonder to our children. We must not allow them to grow poor & weak for us, who are advised to marry, improve, improve, or deteriorate, a father and a mother, we should keep our children from associating with such associates and from their hearing of vice which are to be put in us, but rather, show them our best regarding of vice to be loath, we should with regard to literature we should elevate our child in to the highest, we should furnish them with a strong intellect in an abundance and offer them every opportunity of cultivating their intellectual, moral & social nature if we desire our children to attain a high state of moral & social qualities, educate them, if you wish them to associate with the learned, respect the law and the deservant, & to fight the battles of the good, keep books from them - keep things in ignorance and your most sanguine expectations will be fully realized - Think farmers should permit their traveling men and sons to enjoy more hunting and enable his recreation by visiting and social gatherings, when some young

farmer would have their social gatherings and their social enjoyments, but since that day a change has come over the spirit of their assembly, now when they meet upon the public highway they pass not only past each other with cold indifference but look at each other like a couple of wild cats, scarcely ever stopping long enough to exhibit the least social quality. I think at this age of general intelligence, these social parties, their nature should be more cultivated. The farmer should look upon the works of nature in all its grandeur & beauty and be thankful and rejoice that he is one of sublime nature and gifted with ability of intelligence, temperately doing & honestly cultivating her soil.

{ At the Special request of Bishop, his
Remarks were not recorded by the Secretary }

Mr J. H. Boyd thinks the cultivation of our moral & social natures essential to our enjoyment, and so to be successful as farmers, it is necessary, according to cultivate ^{our} intellectual nature, the success of any & all enterprises depends to a great ^{large} extent upon the person that of his calling, profession or vocation. The ignorant man is always compelled to follow in the track of others, while the intelligent man can strike out on a course of his own, independent & free, relying entirely upon his own knowledge for success. The school man stands out in bold relief, commanding the respect of all his ~~kind~~ ^{kind} is made it, integrity of purpose & honesty of heart. The moral man always makes his friends whether he will or not, no one can help being friendly with those who exhibit friendship to them. He is willing kind & true and others will be so to you - taking all in all, the subject for discussion is ^{valuable} and all important to the farmer, & each

Mr Samuel Dixie, thinks every young man should make farming a study, and then he will make farming a success. The intelligent farmer is generally a successful farmer thinks it an important

to cultivate our Moral & social nature to enjoy ourselves
as farmers, and thinks those who fail to rest upon this principle
feel the great measure to an accomplishing the object
of their desire.

J. B. Smith Esq. Thinks, Truth, Honesty, Morality, and
the cultivation of the the social & intellectual nature,
essential to the well-being of society, and to the success &
prosperity of farmers. Thinks it the great difficulty to
get men to realize this quality, and rest upon them, that
farmers are too apt, after performing the labor of the
body to cultivate the mind. are too content after
they are acquiring this to rest content with the condition of
the other. Says like, looks like, and being in
exact accord with the latter, and bitter feelings of
our neighbors, to associate with those for whom we
entertain feelings of respect, we should associate with
them in proportion to associating with the rising and
performing doing ourselves perhaps much harm and
then no good.

After the discussion, a motion was offered
and passed. Appointing Dr. Esq. a committee of
one to confer with Mr. Will, Editor of the States & Times,
with regard to publishing the proceedings of this Club
and copying from the Oakland Times.

Dr. Esq. was appointed the Editor of the
next meeting — Subject. the 18th

Adjourned to meet in one week

exclamation "Why should he not be the most honest knight, poet,
 Why should he be a lawyer, Why should he follow the honest
 task of others?" When reason tends to force out of their bosoms
 and into the open Society is another virtue that should be
 checked by all, and to be true the former speaks in this.
 Without Society government attend to the highest enjoyments
 History and even followed in the name of sublimity and
 the power and power then the virtue of civility is a necessary
 threat for the understanding eye is cultivated. And yet their
 just turned from your minds. Take away the elements of
 I look from the path way of spirit.

Domestic houses are the first houses where every amusement
 vice is propagated. They produce your passions your
 passions and your passions. Passion creates passion
 your thousand eyes may not be an danger that the work
 is checked for your eyes.

What a world! We are social beings. We were formed for
 society. "God hath put the society in your mind."

There is more away out in the world and distress with the discom-
 fort from the cultivation of the world. It will be our fault in
 our from my own buildings our comparisons at the very same
 to society. We should not then teach each other to be
 in them so early all around us and may be by the time of
 our social nature enjoy it and benefit it. We too are
 ought at this part of our nature. Brighten your brighten and
 debate each other with an undivided spirit as if they had
 trust on each other and of one. I like to see a family group of
 honest as if it were a down through nothing else and more than
 to be held of cold stiff fingers to the shape of a man working
 an even principle towards each other. The more is better than
 all friendly. But what, you will be your happiness you will prevent
 the enjoyment of others. Second Rule - Government is to be
 take the place of society. It is created in society and have
 an interest in each other. Let us all agree to be. Don't
 give us only the world through. Help them, help them up.
 I will let them go the power to create the world of

but it is. I assure if you would get all out of farming which it is capable of producing easy and steady profits you can live and be even saving for life but be honest about it. — — —

— I'll be a few remarks from Mr. Young appearing the sentiments set forth in the Address:

Mr. J. Jay moved an adjournment until a later hour because he would be absent very tardily saying I say City to lecture on the 14th.

By unanimous consent

I believe Dr. L. L.

Harmon Club

of November 2nd session:

of April 1882. The President and Society being absent I Smith City was appointed chairman for the evening & I become secretary pro tem.

I Jay City lecturer of the session subject Bots, says that in the discussion of insect life on a former occasion it was objected to by some of the members, from the fact that whilst they portrayed the ravages and depredations these insects committed on the farmer, they failed to inform us of a remedy for these pests. I propose, not only to give you a history of the bot, and its ravages, but, also a remedy for its cure. In the discussion of this subject I will lay down four propositions, first that no horse ever did die or ever will die from bots alone, no horse is injured by bots, third the bots are contented to remain in the horse stomach as long as the stomach is in a healthy condition fourth thousands of horses are here in the United States by good horse doctors or treating other more serious diseases for bots. Now if I can establish the fact that no horse has been injured or died from the

effects of Dots, then I hold that it is a subject of the most vital importance to the farmer. There is perhaps no farmer that has had any experience with horses, but knows that about July and August, the great fly is very troublesome and annoying to the horse. The female deposits her eggs on the legs and flanks of the horse. There are various opinions in reference to how they get into the stomach, but I hold that this is a matter of small importance. My observations and experience satisfies me that the heat of the sun and horse hatch out these huns, and in the act of licking or biting, the horse gets them in his mouth. I do not agree with some that they are hatched out in the stomach, but are not hatched in the stomach of children. The huns are deposited among the hair on the head the heat of the horse hatches them out, as soon as they are hatched they are no more huns, but begin to bite and the leg begins to scratch. Now we have got them in the horse's stomach, it is the place gotten almost entirely intended them to occupy. If there was no horse's stomach there would be no dot fly. Where is it attached and at which end does it attach itself to the stomach not at the stern end as some have imagined as but at the head by two little hooks. The stomach of the horse acts as a habitation for the Ditt the same as our houses do for us. It feels in its new domicile as though it was lord of all it surveyed, lives as happy as a king, has no desire to dig out or leave its present abode, any more than a man would his warm house, on a cold stormy night. When the stomach becomes

Instead of Lung Fever Killed the Horse

In the City horses have no bots in the country they are numerous in certain seasons of the year and in other seasons there are few of them. It is impossible to tell by the symptoms whether a horse has bots or not, for instance your horse gets sick you send for the doctor he examines your horse, and says Bots are hurting his stomach, you buy some milk and molasses, you say my cow is dry I have no milk, well then you buy some sage tea and ~~molasses~~, the horse gets well (he had a little colic), gets well in spite of the doctor and his prescription. I was called to see a sick horse out at Mr. Buchanan's my diagnosis in the case was lung fever my prognosis was that he would die, I was right, he did die, I opened him, the bots had dug out throy the coats of the stomach and there were some people present foolish enough to say that it was the bots that killed the horse, but the fact was it was a plain case of lung fever.

As I stalk, I am like the scotchman that got in the wrong crowd said we are here for our good, now this is the way with the bots it is in the stomach of the horse for our good I do not agree with the lecture that bots are not injurious to the horse, they attach themselves to the coats of the stomach by little hooks and get their suction pump going and produce inflammation and other serious diseases of the stomach. There is an old adage an ounce of prevention is better than a pound of cure, my plan is to scrape the bots off with a knife blade and wash with salt and lime, salt the lime your hay and bots will not trouble your horse, but as we have had enough of the bots to night

I will direct my remarks to some of the
 other insects that annoy and injure the farmer.
 We ought to study the habits of insects
 in order to know how to remedy the evil.
 The cut worm and grub worm do a great deal
 of damage to the farmer, the condition of
 our fields has a great deal to do with them.
 My experience has been if I pasture my fields
 with sheep I am not troubled with the cut or
 grub worm, but if I pasture with horses and
 cattle, my crops are cut up with the cut worm
 fall plowing I have found very beneficial
 in killing the worms, Lime used as a manure
 is the most effectual remedy for various
 Hessian fly. This is another very destructive
 insect to the wheat crop of the farmer it lays
 its eggs in the fall in first frost of the season
 remedy sow late so your wheat will not put
 in the fall, one frost there occurs a great
 deal of damage from the caterpillar and worm
 I bought 100 peach trees from our friend Mr.
 Bushnell a few years ago. I discovered that
 the gum was oozing out of them but I did
 not know what was the matter with them and
 he did not tell me, I took them home and
 on examining them carefully I found they
 were full of the insect called the borer
 in planting I throwed a shovel full of
 ashes round the roots which caused them
 to retreat from their hiding place. It is estimated
 that a caterpillar will eat three times its own
 weight of green leaves every day, causing
 great destruction to the tree. Remedy
 destroy them by burning their nests, cut down
 the wild cherry trees, the careful farmer will
 examine his orchard as soon as the leaves begin to

put out in the spring, and any nests or tents
 of caterpillars found should be speedily destroyed. The
 only morning, as the best time, as the insects are
 then lying in the nest and may all be taken at
 once and crushed or burnt. Mr Thomas Bushnell
 I think our lecturer Mr Joy has been reading only
 dark parts of the author as suits him, if he had
 read the whole section it might not have suited
 his case or proved his assertions so well, but as
 there are other insects, equally or more injurious
 to the farmer than the moth, what few remarks
 I have to make will be confined to some of
 those species that injure us most, one of the
 most curious and interesting facts with regard
 to this class of animals is, that they undergo
 certain transformations; they exist in four
 very different conditions, in which they may
 be more or less easily attacked by us in our
 endeavours to subdue them. These are the Egg,
 the larva, the pupa and the perfect or mature state.
 Curious instincts for defence, and offence are to
 be observed by these insects. The eggs are
 deposited in the most place, by the mother,
 both as much care and precaution as though
 she knew that when hatched, the larva were
 to be small feeble, and helpless, With an
 unerring instinct the young are directed to
 their proper food - whether it be the foliage,
 the bark, the wood or the pith of our plants.
 All trees, our orchards as well as forest trees
 are infested with what is called borers.
 The Peach Borer consumes the soft bark and goes
 down to the base of the tree, the Curculionid borer
 confines itself to the pith of the young shoot
 which is its proper food, the Apple borer
 pierces the bark of the stem and feeds upon the
 the inner wood immediately beneath it. The remedy
 for these insects are ashes. Duds and Rags

and you must not say the mass

If your dogs bite, if you want them to
be of any service in destroying these insects
a dog is not half a dog without a
nose. Dogs are also very valuable in
destroying these insects, I once sold off
all my chickens, and the result was that
soon became very numerous, sell your fowls
and you will soon be made up with worms

John Jacobell appointed lecturer for
the next evening. Subject
Combination & Cooperation in Farming
Y. Green lect. Feb

Dr. Armstrong in the chair. J. Y. Ashenhurst, sec'y. W. W. Scott, lecturer for the evening. Subject- the patriotism of agriculture. "And they shall beat their swords into plough-shares and their spears into pruning-hooks." Love of country is one of the strongest and marked characteristics of our race. Take from history its bloody pages, and how little, how very little of it will be left! Let legend and story no longer repeat the deeds of valiant Knights and heroic sons, and how much will their rehearsal be shortened. Expunge from the pages of Poetry and Song, their glowing imageries of fierce conflict, the patriotic legions, with armor and weapons dripping with gore and how very many of their couplets and stanzas will soon be forgotten! The warmest affection of the higher nature of our race have ever been entwined about country and home. There are no new developments of devotion, nor exhibitions of sacrifice and deeds of heroism. Strong as is man's attachment to life love of country is stronger. Unnumbered millions have willingly laid down their lives a sacrifice upon the altar of their country; and offering to their country's honor. What country whose sons would not willingly place themselves as a living defense against the ruthless invader? Every good citizen of every government, in every age, will, when necessity calls, yield himself a servant, a soldier, to drive back the foe.

But there are attachments and associations formed by the agriculturists that doubly endears to him his country. The soil is his possession. To make his interest in this secure and permanent, he will brave the wrath of men, the rage elements, fire, flood, and storm. Also, he has to a greater extent than all others, the means of providing the necessities of life to make a comfortable and even its luxuries which make it enjoyable.

The reflective agriculturists well understands that whenever a nation seeks aggrandizement at the expense of another, the territory, the soil, the possession of the agriculturist is the coveted prize, or the indemnity demanded. These things, aside from every innate sentiment and feeling, are interests sufficiently inspiring to impel him to take the front ranks of the patriotic hosts, and this too when patriotism is measured by the bloody standard of the past and present. In our reflective moments how strange, how very strange, appears the standard of patriotism in the past history of our race. Man, to give significant expression of his devotion to his country must take the life of his fellow man, or risk or lose his own in the contest. It would seem that men had never made the calm, dispassionate comparison between him that wears the helmet and mingles in war's "magnificently stern array," and him that wears the plain garb of a tiller of the soil, intelligently and faithfully, performing the duties of his occupation. "By their fruits ye shall know them." The former aims if possible to take the life of his fellow man, and he cannot succeed in this, at least, to deprive life's comforts, make his fields sterile and lay waste his habitation.

The latter is devoting his energies to the production of the staff of life. Nor does he stop at this. To the agriculturists we look for the luxuries of life. To him we look for comfortable clothing and even adornments for our bodies. Perhaps if we specialized by simple illustrations

we may set forth, and the better to make true patriotism. A venerable father, whose silver locks betoken him more than three score years and ten, bending under the infirmities of years, yet he plants a tree whose fruit he knows by nature's laws he will never taste. Though the page of history may fail to record his disinterested patriotism; though song should fail to keep fresh in his memory his many virtues; the legend may furnish no story to garnish the savor of his good works; though no bronze nor marble with epitaph informing visitors of his virtues be erected over his resting place, and tho' the living may pass on in silence and forgetfulness, yet in his patriotism, one calmly dispassionately considered, there is something more enchanting than in that of those heroes whose names and deeds have been perpetuated by all the devices of literature, sculpture and painting. His is a pure, disinterested love of race and country. He has performed in life in the evening of his days without expectation of reward and eulogy, a noble work.

We have heard of the patriotism of woman, often shown by deeds of valor. But the grandmother upon whose features the footsteps of time may have made many impressions, -- impressions all bordered and fringed with the smiles of kindness, -- her hands trembling, her vision failing, her life waning, still instructs the maidens around her. She teaches (as once was taught the mysteries of the distaff) the mechanical manipulations and the chemical formula of a wholesome loaf of bread, or she instructs them in the specialties of cleanliness, essential to good house-wifery, or in the art of making clothing for their fathers, brothers and (husbands, too when they get them). She also instructs them in the cut of their own garments, which are to be kept pure and spotless as their own Christian character. This woman is manifesting more love of country, more regard for the comfort and happiness of society, than all the nimble-tongued race whose intellects are too strong for their modesty whose mental powers so predominate, that they subordinate all, that unerring wisdom has taught us in regard to woman's true sphere, to their own vain conceits. Their duty is public notoriety at whose shrine they worship.

The ancient prophets in scanning the misty horizons of future ages saw a bright day in which the horrid implements of war should be transformed into those of agriculture. "And they shall beat their sword into plowshares and their spears into pruning-hooks." The plain inference is that in that day a man's patriotism shall be measured by some standard of agriculture. His love of country will be no longer estimated by the amount of the blood of his fellows attaching to his hands. Man's inhumanity to man shall be weighed in the balances of intelligence and be found wanting. Do you inquire for the when of that day? When men shall become wise enough to refuse the evil and choose the good. Do you demand the how, in regard to this state of things? "Knowledge shall be increased." The government of Prussia and also our own government have started in the right direction in the establishment of Agricultural Colleges and Experimental Farms. This is commendable so far as it goes and should be encouraged by all those engaged in the business of agriculture. And had we the ear and the confidence of the young men now being trained in these Institutions we would say to them, you have a high mission before you. From your numbers we are to expect the Lieutenants, Captains, and Generals, to instruct and drill this great army of peace and good will. From you are we to look for the Engineers who will give us new lessons in sapping, mining and blowing up

stubborn and tenacious soils. We shall expect you to furnish the Surgeons who shall prescribe for all the ills, that as agriculturists we "are heir to."

All who may be engaged in agriculture may not be patriotic; there will doubtless be camp-followers and even spies and traitors in the ranks. It has been promulgated as an Aphorism; that he who causes two blades of grass when but one grew before is a benefactor of his race. This may not be as true as it is plausible. If in causing this extra blade to grow he should exhaust the soil by some stimulating process or combination and leave it impoverished and on the way to sterility, reaping present profits at the expense of future productiveness, he should not be esteemed a benefactor. He is no example for the patriotic husbandman any more than the assassin or the bushwhacker, is the ideal of the true soldier. But would you know who is the benefactor – the true lover of his country? It is he who so manages his soil that it produces abundantly and yet is careful that the coming man may find it still increasing in fertility.

The farmer whose ambition rises no higher than to know how to successfully to cultivate a crop of cabbage or to feed and fatten swine, is of all men most to be pitied. Since selecting our theme we have been frequently plied with questions as to what we expected to make of it. In some remarks it was clearly implied, that in it there was scarcely materials for amusement, much less for reflective thought and solid instruction. Even our worthy President, the Doctor – warned that you might expect something "hifalutin." I trust you have not been afflicted as his prognosis would indicate and that in the future he will be chary in giving an opinion, at least, until he has seen the patient.

And now it behooves us to feel as if we had a work in this world for the world's good. We should infuse more zeal into our occupation. This would have more influence in making good farmers than knowing all about its practice and its specialties. Another thought we would seek to impress as of more than weighted importance. We hold in our own hand, subject to our own choice, the position we should occupy among the world's noble men. If we are contented to occupy a low station, we can see to it with very little effort. If while we feed the swine we would fain fill ourselves with the husks they leave, the world would cheerfully concede to us the garbage which we have chosen. If we are willing to do the voting as politicians may dictate, they may, perhaps, before each successive election day, deign to shake our bronzened hands, and with bland countenance and many bows and nods, call us clever fellows, but secretly feeling that we are their thoughtless, willing dupes.

But, if we, like Rome in her days of darkness and trial, should seek from among our numbers for a Cincinnatus to manage the helm of State, the may you expect to hear from the same shoddy politicians, a perfect howl – want of statesmanship.

But doubtless the results of such an experiment would be as happy now as in the days of Rome. Honest statesmanship against political jugglery. We should estimate our calling as superior to all others. No profession, that is concerned only about the things of this life is more honorable and exalted. We should be animated and encouraged by the reflection, that while

we toil and sweat it is the proceeds of our labor that is keeping together the souls and bodies of earth's millions. And if we have uttered a word which will give to anyone a higher conception of the importance of his occupation and that when he has intelligently, faithfully and diligently performed the duties of the agriculturist, he has thus served and honored and advanced the interest of his country as a true patriot, we shall have accomplished our purpose and have a sufficient reward.

Other members of the Club made remarks on the subject, but they were not recorded.

M-. Stott was appointed lecturer for the next session. Subject, Bees. Club adjourned.

You and
 Of course as you
 You create and

to

or

A blank ledger page with vertical columns and a horizontal line. The page is divided into several vertical columns of varying widths, typical of a ledger or account book. A horizontal line runs across the page, intersecting the vertical columns. The paper appears aged and slightly discolored.



The world which we inhabit is in
one respect the most remarkable of all
the vast system of worlds created by God.

Reorganizing Super of Laramie Club of

Verdellion Township Nov 19th 1872. I had but six
only a quorum of members present, but
it was thought best to reorganize the club, thinking
the hope that those in sundry would be increased
by those present stirring up the absent to the importance
of the association and the advantages to be derived from
a good attendance upon its meetings. W. H. Foxall
was elected Secretary also Treasurer.

Dr J. G. Sumner was called upon to give his views upon the situation of the Club and submitted the questions and invited with pertinent and precise suggestions as to a proper course for conducting the business of the Club that order was the first law in all undertakings if we wish to be successful whether in the meetings of our Club or in our daily employments as persons.

Mr. A. Nelson, in a vigorous and laudible style gave
his views upon the importance of the club and
that to be ^{an} accomplished farmer there is a necessity for
a training which few of the pupils that which we
are in the club desiring pursuit we would do well
if we carried into practice more of the pursuit and
that in this way alone could we expect to make our
boys felt as ^{an} interest in this occupation. He held that
it would be an advantage to every young man who
might be his pursuit or occupation in after life to
be a practical farmer.

Mr. B. saying, believe me no farmer had put that
account of education which we should have in
view of which he cited the prevailing opinion among
honest and of which we know so little. That all treatment
was more like work, believe we should have the knowledge
that would give an appearance that when we have a
look around of any kind that we would not be pressing
for it rashly or ignorantly. There was all heart of
sympathetic conversation on Episcopate influence.

As I had been by the roll of members present this evening
to lecture at the next Session Class for his subject
the

Cultivation of the vine

is proposed to meet in one week

to hear him

I attended on the

of variation. Translated

Session of farmers club, at 4 o'clock Nov 5/72

I had been by the roll of members present this evening
to lecture at the next Session Class for his subject
the

Subject Cultivation of the vine

Mr. Bushnell introduced his theme by claiming that he is
not that interest taken in our community in the
propagation and culture of the vine that its importance
and present demand it had been held in the past
that the grape could only be cultivated in the neighborhood
of some large body of water that islands and those of
Lake Erie must of necessity monopolize the business for
it of Northern Ohio but experience had to far as our
situation is concerned affluenced and put to shame and
disprove the theory for right here in Hagerstown and
vicinity the grape is as much at home as anywhere
and, was rather inclined to the opinion that we are
more favorably situated than the much celebrated
Lake Region as we have had long experience of the
profitableness of the crop his opinion, it the most
profitable of all fruit culture or any other farming or
horticultural branch we may engage in he would give
his subject under two heads propagation and cultivation
varieties made of propagation is by seeds the grape is easily
propagated by seeds and from this feature of its propagation
we are indebted for all the new varieties it is by hybridization
that we get new varieties there is and has been an army of
men engaged in this branch some of them planting and cultivating
thousands he noticed Hagerstown of course he hybrids
are not all successful some will be inferior to even the original
others but occasionally a worthy offspring and is known to
the producer and the country he would name a few of
the parties that have been engaged in introducing new varieties

the first season

in the second

he expects the same result, ~~unless~~ he should be

able by participating to produce something better which is attempting to accomplish by the liberal use of larger manure but there might ~~accomplish~~ he would say that being upon the side but present more branches and longer and that they were equally sweet with those raised upon the proper land. However pointing he regards as impracticable in regard on account of scarcity of labor and if it were he regards it as inefficient and injurious. The injurious effects are that in pinching back the plants ^{that} is intended for the growth of wood ~~is~~ forced back and makes the first buds for the next season come forward prematurely and you get an earlier crop but less than that that can be done. A probably another reason you cannot cut the roots without injuring the vine and vice versa that is when both are in growing state. But any cutting or pinching that is done should be when both vine and root are dormant. His experience has taught ^{him} that the vineyards that we have planted following the instructions are to close between the vines and to ~~align~~ in the rows instead of 6 or 8 ft he would plant if were planting a new ~~vineyard~~ plant 15 to 20 feet. You can then cut back with two being instead of one it gives you room to drive through with wagon in gathering the fruit as well for participating purposes. He has ^{found} it a two year old grape vine with part of the roots dying ^{part} of them the vines to follow the roots and dig them they would have been at least six feet in length and that two years dig or eight years old the roots would extend 80 feet and hence the necessity for space between the vines as to balling the ^{fruit} done by post. But here there had been mistakes made in placing the lower vine too near the ground 15 inches the grapes often become fouled and some do so well in ripening as when trained before he had ~~about~~ determined to pull out the lower vine and leave it at top of the post. Some kinds of grapes that formerly succeeded well with had become worthless for cultivation. He doubt Calaverita delaware and some some of his staff he had dug up and burned other vines of two series of Calaverita

did not regret regards their room better than their company although the last season they produced a fair crop of fruit. The friends that he returned mostly of cultivation are the Concord and Hartford Red fire. The Hartford is valuable as the earliest grape we have but regards the Concord as the grape for the million. Rogers Nov 4 1848 learn from what little of experience he has had with them are acquisitions and worthy of cultivation.

Dr. Yocum had been much interested and instructed by the lecture and believed that perhaps the interest he had taken in it was ~~made~~ stronger by perceiving temperatures being for the last year engaged in the cultivation of the vine was ~~apparently~~ disappointed in the lecture that it was proposed to hear something elegant on the grape question as the lecture is regarded by some as being upon the grape question a lot of Minomania feeling in a further form as having grapes upon the brain. but the fact would have to be testimony in the future that the lecture was sound and orthodox and that his heart is laid on the cultivation of the vine. In every watching in life it is of first importance that we start right. Many all pictures are consequences of our not knowing how, or not having a definite object in view. In starting a vineyard this having been and the result we expected to obtain should engage our first attention your soil should be considered what is capable of producing is suited to the grape we should take into account the climate then the laborer what we wish to make of our grape when we gather them whether for wine or table purposes all this is necessary first to know whether we can cultivate the grape with any reasonable hope of success and second it will determine for us the varieties we should cultivate. Now in starting a vineyard if you purchase the plants please bearing them well often to try to inform upon your vines of 2 or 3 years old at an advanced price over those of one year claiming that they are better and will come into bearing sooner, at the same price the vines of one year old should have the preference in reference to planting in imitating the Germans and French.

all have made mistakes in this country they should be punished
 than 10 + 10¹ believed that the grape would by itself grow
 to come into more general cultivation on account of the
 position of other kinds of fruit the canoes are after our
 Plums. Peaches have nearly failed blight on the pear the
 viceroy and California sending our apple orchards thought it the
 part of wisdom for agriculturists ^{to look} after these failures
 and show ~~some~~ ^{the} people a substitute another view of this
 question every nation it seems must or at least will have
 some alcoholic beverage some seems to be whiskey now the
 question of our own substitute light wine and by which which
 will not in that way promote the cause of Temperance & Sobriety
 it did seem to him that this change would be a great benefit
 to our country

As for eggs he did not think it was the right time to say & saying
 that we had stayed away from the consideration of the subject
 before the club the cultivation and has given us a Temperance
 lecture would just try to him before he can do away with
 drunkenness he will have to bend the fork-knives around
 and kill off that Clap for done is necessary but is just that
 will take so much whiskey or anything else as to make him
 even drunk so he can't stop it with your mild stuff but you
 might perhaps make boys out there as well as drunkards & fools
 through from his observation that lecture of the evening was
 correct as to the proper method to cultivate the vine in this
 country. he was born right among the grape bushes on the lower
 bottom that over the ocean this kind of cultivation would not do where
 land is very high and very poor it has to be made the sweet off-
 shore they plant 14 + 12 feet instead of 10 + 10 as here recommended
 when the lecture had made some money out his grape crop but he
 did not that had taken a great amount of labor to bring it out
 and some stinging things as ^{propagated} by the Archbishop and would
 say that he would not have accepted the highest wages of any
 he has been in this country agreed to follow him as do the same
 amount of work he did pull up a weed very difficult water
 being there was no digging a tree & another. if he were going
 into the grape business he ^{would} want that at forty five years of age
 he would want an industrious disposition he would

Session of Harmon Club of Versailles, Iowa

Evening 3rd 1872. J. Dushnell was the presiding manager.
 After J. S. Grubell lecture for the evening failed to put in an appearance
 Club concluded to discuss the subject of the lecture.

Feeding Cattle

Dr H. Armstrong would be glad if some of our young men
 would attend the meetings of the Club though the organization
 would be of some advantage to them should to any other of
 they could only be induced to attend its meetings the question
 is the evening is one that from experience he can give
 but little advice or instruction has formed by what little
 of experience he has had in the business and rather important
 opinions ~~of the business~~ of its profitability believe that parties
 that have made any profit in this branch of agriculture
 have done so by purchasing at very low rates or other
 words by skimming the cream rather than any real income
 from the feeding to feed cattle profitably if there can be
 any realized from it. It would be important for the farmer
 that understand the value of different kinds of food for
 fattening purposes some kinds of food go to make bone flesh
 while others contain more carbon go to make make fat in
 example for fattening they cultivate roots feeding them with
 oil cake or over our own country there seems to be the
 entire dependence the root being entirely depleted and would
 seem to be taken for granted that their cultivation will not
 pay for fattening purposes something important thing which should
 be kept in view when we are purchasing for fattening purposes
 is the greater tendency of some breeds of cattle to take on
 or longer amount of fat from the same amount of food
 than other breeds the Cornshires will fatten on an amount
 of food that would scarcely better the condition of some other
 breeds but after a man has understood these things
 and put them in practice he had ~~no doubt~~ if there
 was he believed that the profits were for the most part in
 the manner and for no dollars are to be taken into account
 it. Farmers would be about as well off to sell his grain
 and buy.

I feel sure it will not take me very long to
 to tell what I know about feeding cattle or at least to give
 my opinion. I am disappointed that the lecturer for the evening
 is not present for the reason that he has been more
 than any of us in business and believes that he has been more
 successful than any other member of the Club and that
 he is so busy and careful in all his undertakings that his
 advice and suggestions would be entitled to more consideration
 and would of more value to the Club than any that might given
 by any one that has less experience. So far as my opinion goes
 it does not vary strikingly from the doctor would just as
 soon raise or feed a horse as there and consider the
 raising and feeding for more profitable. But here are
 few suggestions on they way to feed cattle profitably and
 first the should be well protected by some kind of sheltering
 in inclement weather particularly in damp wet cold
 weather. Great is another consideration the water you
 keep very animal the more readily will they take on fat and
 this can only be successfully accomplished by stallion
 them feeding regularly when the proper time comes
 not keep your animals looking to suit your convenience
 but do it at regular and set times. As in fact even
 almost realize when we attempt feeding stock it would
 break it believe that this way of feeding even in the
 stock is wasteful requiring more grain than is really necessary
 it would better to have it ground or crushed and better still
 to have it steamed or cooked than in doctor has suggested
 there is very much in the kind of feed of cattle you
 undertake to feed my experience leads me to believe that the
 Americans are the best that are the most profitable for their
 purpose than some of the whole make comfortable
 stallion. Make friends of your stock what ever your relation
 may be towards them make the believe that no other could
 so kindly as you do make this apparent by never letting them find
 food or drink feed your grain in such shape ground or
 steamed as will most economize the food and be careful and
 vigilant in the selection of the animals with reference
 to their fattening, & ability about after you have done

all this which I believe to be the most economical and
 judicious method of feed. It has been shown that whether there
 is any waste money in it.

Dr. J. Graham. This is a subject of considerable importance
 and I hold the opinion that it is one that we should all
 take an interest whether feeders or not in that we are almost
 without exception lovers of good, and healthy and our
 own very expensive scraps about a new piece of harness
 or shoe being about as palatable ^{and expensive} as
 anything that goes to adorn the inner man. An impression
 grows what has been of the way the feeders of cattle get along
 riding from to farm with money in bank or loaned out ^{this}
 by their neighbors. From this knowledge he came at once
 to the same conclusion with the man who had raised the
 stock this evening their cattle feeders have done something more
 than double their means for as their prosperity will tend for
 it have noted the fact that very soon that goes with this business
 it requires but a few figures to tell the income of his stock
 and they do not come in the way of acquiring but are made
 in this way saving and continuing intelligence and a sound judgment
 or rather a necessity of discrimination. Then as to the manner of feed
 one is constructing this business he will be careful to provide
 good water or good supply of good wholesome food and he
 will discriminate in the selection of his stock he will not
 only be governed by breeds but will understand that some animals
 of the best breeds are easier fatten than others of the same
 breed he will understand the marks and form by which
 the quality may be known a good horse save purpose in
 the animal economy it is by food that growth is promoted
 the food supplies the waste or decay or decomposition which
 is constantly going on then it goes to keep up the
 animal heat or temperature. Now it is important to understand
 the kinds of food that is best calculated to produce a
 desired effect to produce growth the feed should be for the most
 part of a kind that is nitrogenized while if the object is
 fattening it should be non-nitrogenizing and the same for keeping
 up the animal heat this in cattle is about 80° Fahrenheit.
 This temperature of the animal does not vary when it becomes

fat requires more nourishment to maintain it winter than summer hence the necessity of supplying stock that you intend to fatten with the sustenance of the weather as it will require an extra amount of food with the exposure to keep up the animal heat and of the kind that is required for fattening and it is only what is left after the heat is supplied that goes to ^{the} adipose account. Experience demonstrates that you can fatten not drive or leave so much a day and fatten with even so large an amount of food. Now to turn up a profit that profitably they should have more shelter than to be kept guard the more exposure the less fat therefore it is well for them to have company day in & out so that they cannot injure a another. Also their skin is great money besides both these stock when it about half there is certainly profitable as they are not so much as to large or fine as when fattened out and it is selling them at the way that they begin to fatten profitably as it will not take more the amount of food to put on the last half that it did the first.

Mr. S. Doring could hardly expect to obtain or instruct the Clerk after the scientific way it had been handled but it did seem to him that question was rather limited and it would have been of some benefit to the stock if it had been more extended and embraced the raising of cattle and the different breeds there are but a very few parties in community that are garden which are all engaged in raising cattle. There had been nothing about this evening as to the proper time for fattening and for fattening thought that there is a good deal of uncertainty as to ~~the~~ it. believe that now if it is intended to put from the stock should be cut before it is fully ripe and the same is true of making hay, before there is more snow in the before it is fully ripe and that cattle will hay better when before it is cut before the grass is ~~fallen~~.

J. Westcott - If there was any one who had been nothing about it it was this of feeding cattle had generally feed one way year for family use had mostly done it with pumpkins with very little care or thought about it.

As to Agriculture - the best theme is most profitable in
 husband would be to feed cattle in winter and which
 on grass as a very small quantity of grain would be all
 that would be required regards it no decidedly the best known
 some of our members that have gone to the old Dominion their
 cattle will now be living on leek or what business does not
 carry them in their better or best

Subject for next Spring is Sheep Husbandry profitable

Dr H. Armstrong lecture

adjourned to meet in one week

10/11/72

Dr Bushnell on crop

Report of Harman Club of Pennsylvania Grounds 10/11/72
 J. H. Smith President presiding subject for the evening
 is Sheep Husbandry Profitable Victoria Dr H. Armstrong
 Secretary was tardy and only heard the last sentence of
 the Lecture abundance of the Club have spoken of it in terms
 of introduction

Mr J. H. Boyd felt pretty green as that was the first
 meeting of the Club he had attended this winter but
 felt at the same time that he had been familiarly
 with the subject by forty years of experience in the
 raising of sheep Husbandry and from witnessing the
 profitable in the greatest sheep country of America Brighton
 Co. Pa. he believes its importance is bound to come in
 the agricultural line and of its necessity there is no
 room for any doubt or objection to dispute the
 fact upon might as well say this if it were not for
 the clothing made from the wool of sheep what would
 become as in our instrument winter than their flesh
 is no more a comfort and as much a necessity for the poor
 man as their wool is for the outer, then there is a
 certainly in sheep Husbandry that does not pertain to
 any other branch of agriculture present in his experience
 of 40 years he had never raised a crop while in
 an attempt at grain raising he had met with
 many failures and often received a - nothing

prices for live wool and sheep than ^{to} feed for live
 grain. In Sheep Husbandry is the best argument of
 any part of Agriculture. Sheep have always been a standard
 criterion of success and as compared with other stock
 they are certainly entitled to the preference. The very saving
 in the fencing, required for sheep and other ⁱⁿ a handsome
 profit in favor of sheep. Then they do not destroy your
 farm by tramping it up in wet weather like other land
 nearly ruined where smart feed cattle in open winter
 tramping their fields into mires. Sheep Husbandry if
 judiciously managed will enable one giving a close object
 to sheep that they eat of to have, when ever this is the
 case they have not injured right then that have had the
 best crops by my observation more feed than sheep
 upon grass until it is well started say 4 or 5 inches high
 then if you do not have entirely to mow for your own.
 They will not offend the soil for the whole but the year
~~substantially~~ they leave and their droppings are an important
 increase to the fertility of the land. I believe I am better
 in theory than practice, the way to overcome the danger
 for turning upon your grass early in spring is to have
 your corn field about the middle of August with
 eye this will make late full pastures as well for your
 brother in winter and early spring, and so till the grass
 has the start that I have suggested another matter of
 economy in sheep Husbandry is shelter, open sheds with
 good roofs or protection from rain that will cover
~~the~~ ~~that~~ and or dry place to lie in will that is
 required. It is profitable to feed sheep some grain
 and commence early in the winter by all means feed
 them grain in November & December if you should not
 feed in any other month of the year.

J. V. Grubb considers ~~sheep~~ ^{sheep} Husbandry profitable but
 would not think it best for a small farmer of 20 or 30 acres
 would be better for ^{big} some grain and keep cattle or some
 stock that would make a large amount of manure than it
 all depends upon management as to profits and almost any
 business may be made profitable by good management.

at 10 cts a pound bringing him \$100 he has 10 lambs
 has sold fifty of his original stock for \$100 making his sales
 \$2500 super dollars more than first cost and still having the
 same number of sheep he started with. Now is that pro-
 fitableness after there is more in "dams" being cut out for doing
 something Mr. Grubbs' supposition that almost any business would
 be profitable if well managed is the entire basis of my
 L. J. Green with my limited experience do not suppose I
 shall be able to add much in the way of enlightening the reader
 on sheep husbandry. was struck with the fruitful remark of someone
 being the key to success no man can succeed in any business
 unless he takes an interest in it and applies his energies to it
 a business done 12 or 14 years ago when I came into possession of a farm
 being a Novice in the business he commenced with different kinds
 of stock purchased 15 sheep 7 head of cattle 12 cattle and some hogs
 was not long in finding out that the cattle and hogs were
 "failures" as far as profits are to be taken into account but
 cattle and sheep had turned out satisfactory. the situation of
 his farm or land that there is considerable if not little
 this part of his farm has furnished the pasturage for his sheep
 and he did not have, ^{then} would derive no income from it and
 his crop with his sheep would average about \$250 for wool,
 mutton 30 to 35 lambs sells about thirty old ewes every year
 at about \$75 making \$225 of a yearly income from his sheep
 when he takes into consideration that if there was not for his sheep
 he would realize nothing from his available land they are certainly
 profitable. men not prepared to say that when land is of good
 quality and all kinds of productive that sheep raising would be
 more profitable than grain growing or a mixed husbandry
 with farmers like him there can be no question as to profits in the way
 of raising or keeping stock of any kind it is important to have prop-
 erties in improvement whether there is room for sheep or not or other
 stock it is well to have largely in fact to have them completely absent
 then it is necessary that we have certain standard constants in
 our soil for the formation of them and the permanent system and
 keep up the work of them if you look anywhere intelligently or
 find to yourself the kind of food that contains them and in proper
 shape I think I may be qualified to state that your stock will

& Mr. & Mr. Wilson were uncomfortable in not hearing the
 lecture of the evening. Has kept a good many sheep at different
 times and has had nearly 500 head at one time is prepared to
 believe a certain limited number being a term of profit to the
 farmer but to make a specialty of and devote one's time entirely
 to it he did not believe to be profitable as compared with mixed
 husbandry. Some of every kind of stock united to grain growing
 the element of the output ~~in~~ ^{of} husbandry profitable would
 imply that this kind of husband man is engaged in the outside
 operations. My impression is that the man engaged in a
 mixed or even grain growing husbandry will beat the sheep
 man 3 to 1 in the way of profit as he has but to manage
 this evening some figures but as to profits that left nothing out
 of the question the matter of expense we will take the man
 with 100 acres of land and 100 sheep on a borrowed capital
 and we know his account will stand when the expense is
 deducted to keep 100 sheep over winter will require 10 tons of
 hay this at \$7 per ton amounts to \$70 then it will require
 in addition 100 bushels of oats these at 30 cts amount to \$30
 then it is a very low calculation 20 cts ^{per head} for summer feed
 and 20 cts per head for washing and shearing, making in all \$120
 and his 100 ~~heads~~ ^{heads} of wool amount at 20 cts a pound to
 \$2000 and that \$2000 is subtracted without subtracting the amount
 at which the sheep was willing his feed should be charged
 and that kept with the appearance of the year would present now that
 the profits of crop are all with the grain grower this is all a
 mistake and as far as my appearance goes it is no more reasonable
 to count upon contingencies in the one case than in the
 other. To put a sheep man for instance it is all a fantasy it is
 no compensation for his taking away grain off the land having
 it here and exposed talking about better and worse he had a few
 heads of sheep the past season they were sold for \$5 per
 head and he raised 17 lambs and had just them nothing
 they had a large range but if but a few hundred it has
 been a very different story as to feed and care and the
 2. say weight of fleece a few sheep will pay in farming
 a man's losses what ever he has a natural inclination for
 the more heads of cows let him be a shepherd of those cattle

or boys is ^{the} preference let him give them his attention and care.

Mr. J. Lloyd - If every man is to follow his natural bent or inclination what is the use of our schools or any other system of education we are here to instruct and receive instruction. Can't we be educated so that we may overcome our natural bent I think we can if care be taken to use that our propensity is connected in pursuing a course of conduct or keeping a special kind of stock. The way sheep husbandry was originally even managed is to let about 400000 sheep on the farms with 1000 and then they had some just as many horses cattle and hogs as if they had no sheep and then they sold better to the market amount of land as many men as should have and more as if they had not a sheep on the farm than to that their sheep to live on nothing than of course from this year to the next there will just ^{with out the} difference for all those ^{the price} it is all saved & they proceed from here a pure pasture in Washington Co. etc.

that kept sheep as a specialty and making their farming enterprise entirely one from growing their corn and raising cattle to them and

there have not one of them that business in making it profitable and when their land came to be cultivated in 1844 it was said to be the best? we are extremely passing the farmers a strange course in the country.

we always millions of pounds of wool to be imported because we fail to supply the market requirements and they have not improved the land of the frontiers. There are 100,000 millions of pounds of grain the very fact of our land.

I think that it is the way to make a good thing. There have been few sheep kept together but not matter. Many a man had on a sheep farm on small flocks they thought it was better on account weather pasturing in cold wet weather. In some of these small flocks there have held a large amount of water they thought have a good place to live not long before the wet ground is on the lower when they are thus judiciously managed they must well and I pay Mr. & Wilson and not wonder at the Dashwell or any other man that should there a forship for his flock. Nothing that I think are profitable we are certainly very short sighted when we attempt to compete in sheep husbandry with the large flocks of the west in the branch of agriculture and with foreign countries as Australia and Brazil have been even then in a hand.

and they can better afford to raise ~~with~~ for to do a present time
 for than for \$1000 than just waiting there waiting and at
 no expense except for hardware the attempt at completion is
 our probability they can beat us to death.

Dr. H. Armstrong - have for some years been breeding my
 rain sheep with larger breeds have succeeded in improving
 the average size of the flock believe it to be profitable way
 of improving our stock. all the best about natural inclination
 - our particular policy is to select our best and adopt them to
 a new situation in life and nothing more is necessary than
 to let a man know that there is money in doing to make him
 do it. have friends in King County that keep goats on
 number of sheep they have Dutch Bows of one side
 and goats on front of open back in that goats they keep
 rain sheep all winter going into the basement above the sheep
 these sheep do remarkably well and the business is kept with
 them. rain sheep by my experience can be kept without any
 on larger flocks than the common large breeds. finding myself
 to let sheep run to big flocks until it is to make that it
 will show on them find them can speak ^{very} on the
 point.

to Ray says found others remarks have been made upon the
 same place and with the same conclusion that the man that
 who there - a name known at a well it was so crowded and
 crowded he felt certain it must be somewhere and he didn't care
 now to where. his calculation of 100 sheep to 100 acres of land
 is altogether & sheep to an acre is counted as 100
 calculation so that we must require but 20 acres for 100 sheep.

Dr. B. Smith says have found much pleasure and interest by remarks of others
~~Dr. B. Smith says~~ My experience is not much with sheep
 from what it have found have learned that sheep will winter
 well and do well in good hay if they are kept in well
 cultivated shade yards however if Bank open upon one
 side and well adapted to the purpose but not profitable either.
 was with 60 head had 80 lambs from them their cost and
 expense being \$1000 or nearly so per head and increase about
 \$1000. The first of 1000 it is the rain but whatever
 we do to get that money and in every way to do it just right

we are susceptible of education think it is better that we should be educated to do things upon the best system and not a good method than to follow our natural inclinations and do things haphazardly and without system

The Club on action resolved by motion that the next session be an experience one, upon the question how any member learn anything upon the first year in regard to Agriculture. ^{members to be called upon alphabetically}
 J. H. Smith to be called upon first in the month of April
 J. H. Smith to be called upon first in the month of May

Farmer Club of Hamilton Township, N.Y. 17th 1873 J. H. Smith has ~~expressed~~ ^{expressed} his interest in the subject for the session has any member learned anything, how in Agriculture or Horticulture the first year.
 J. H. Armstrong this kind of meeting is new experience to him one part has learned the first season that when corn comes in badly or is destroyed by worms to remove it once half the plant the better way is to remove your ground instead of the ordinary way of pulling it with hoe. he replanted on the 10th of June the first season and had a good crop.
 Mr. J. H. Boyd has never had the privilege before of enjoying a experience meeting it will be conducted by him of the club at least the minutes of subject will show that last season he attempted to lecture on the subject of plowing better, as well as on corn and so on. It should be shown that his experience the first year in plowing had taken a considerable of his theory and if him we are circulated sometimes to adapt ourselves to circumstances. he felt certain that he had a good plan and thought he knew how to use it but from the situation of the ground that fall he found ~~that~~ ^{that} a good plan or that it could make good work and in fact it was a poor job. he could agree with the action about re-planting but would strongly caution to a full year of work before re-planting would be only a waste of time.

Mr. J. B. Bunkerell. Thought that any one that had
 heard nothing more in the past year must be a
 dull scholar & even if it should be so, he thought
 that we have known we should be willing to impart it
 to others that they may enjoy its benefits. The road is
 made up of cobbles and we cannot understand it all at
 once. He had learnt how to be believed to strongly
 protect fruit trees from the depredations of wild mice
 & in a young orchard of apples he found the
 gold mice had commenced to get their living at his expense.
 he thought that he would experiment in getting them away
 & in the time this he did with old iron wire & bands
 but could not learn whether this was the way to
 a safe look off the top and bottom than cut them
 when frightened then opened them placed them around
 the trees and then closed them up. he could not
 say when he came to remove the trees that it had
 been an effective precaution to any further depredation
 the same trees were the same for living & winter if
 they were taken care of & one tree in small forest the
 most common is the quality of soil or grass & the
 element to the cloth in his lecture on the wire but
 he said there is no ^{any} ~~any~~ ^{any} ~~any~~ and this subject that turned
 on wheels and with some it again in planting paper
 & the best soil there of the ribbon kind just look
 upward soil as will bring you the very largest crops of
 plant and corn. Now, Mr. Bunkerell has answered
 by promising to cut trees and vines in the winter and
 assured that this was a mistake being answered
 since before this we go to bed. There is no doubt
 that would answer for this purpose from stock in
 the morning and sound when the trees come to shed and that
 the limbs then turned were killed down to the body of
 the tree and in some cases even the bodies of the
 trees were killed nearly to the ground. he would not
 take paper and let any one tree be brought in
 in winter and even the risk of it. He would
 never have to follow right down the ground trees of the
 road just at mouth of river and some other places.

afforded it to a freezing atmosphere

(Mr.) Driffofer, has been on the point of raising some
cane for a number of years but until the past
season succeeded in getting all the stalks ripe. He was
rather defeated in getting a start in the spring having
to replant the third time before he got a growth the first
time. In June we saw on the train a lot of people who
felt he promised of the top and when they had cut him
and they got a cut or sawing he picked them off. It had
a good crop and they all got ripe.

The present bearing has always until the past season been
making a head for the past year has rather been playing
off and taking things easy but now if you want to have
things go right and to be as good as possible you
have got to work. He was requested to give his opinion on the
Berkshire apple. They are "large bright red apple nearly
as large as the Redhawking or just as large as the
Dorset for an eating apple but not for cooking. He is
of opinion that it is a fair bearer and is a very
sweet taste. He has a lot of split or broken trees with a
large crop of fruit.

He also says that he has seen a lot of people who
are opinionated that the present season is a good one and
that he cannot very well understand how any one who
goes through an entire year of that season can think that
they would certainly have to show signs and signs to be
satisfied with any thing that is going on. The past season
that had a remarkable one for people who are and they are
not only the past one but a number of the past ten or
twelve. There is a change in climate and in the
past such seasons as they have before the winter part
of our western states and territories are no longer seen.
The equable temper and moisture that was common
in the early settlement of our country. There is a
cause for this climatic change and he believes it is
to be found in the destruction of the great old forests
that in our father days covered the whole of this country.

read that the destruction of these forests it has been
 claimed our "wrecking" haphazard sort of way if they had
 opened up farms on the first place had left their
 lumber upon the west sides of their "then" when
 every west line of section at the mouth there would have
 been a wind brake and they would often be upon the
 west line of every quarter section and frequently upon
 the west of the half quarters. These frequent windbreaks
 if they had been left would no doubt have materially offset
 the severity of our winters and storms of other dangers
 but this destruction is still going, just with a malicious
 second and further afterthought as an entirely destroying
 what little is left of these forests because it is high
 time even would having something new if, then wants
 a palatable patch and because he thinks his grounds
 will bring the best, he had much better accommodate his
 taste to those raised upon land already cleared than
 longer engage in this uncertain and disastrous
 business is beginning to be an awakening up on this subject
 and some states are taking the initiative in the enactment
 of laws to encourage the growth of forest trees
 then "wrecking" land cleared already and more than enough
 on the farms as there is cultivated it, many springs that
 were never been known to fail until now are dry and
 laying up. This may also be attributed to the destruction
 and further the soil no longer having the shade required
 to make it hold moisture - the "joint" speaker would
 answer for corn if he had been wiping, would not
 the so much more than one half to one wiping
 when I plant corn I sometimes put some to back and
 spread so as to be prepared for a contingency, then I
 spread with two spouted corn and with a fire in the
 heavy grain crop comes along altogether it is not made
 too late on account of the infirmities, was not in
 sympathy with white in yellow corn the first season
 that was much in favor of the white planted half of
 a field with both kind each part of the field was
 white good and showed and worked strictly white

The white turned out more than one fifth more
as high as he could make an estimate in bounding
the track the difference in favour of the white was at
3 to 4 of yellow

J. S. Grubill had learned the value of deep plowing
in his corn crop. his ground was plowed very
shallow last spring. It was said that if it had been
plowed right would have brought a good crop and
the fact was a favorable season but his crop is
not so good as some have on poorer land and this
can be no other reason than want of depth in plowing
if he had a ^{springing} field with one half to three fourths, he would
thoroughly cultivate and reap the benefit of life and living would
replant with him

J. D. Smith Jr. Has had some experience the past season
that he does not know very well how to account for
in replanting corn would not reappear or blow up and
more than one half was missing had replanted the po-
tation with one a more field in one day with a team
of 3 men and a boy and could be no difference in the
corn when he gathered it. This was experience and the
one he cannot account for was with corn put on
the land he claims the best for that purpose and about as
good as any in the neighborhood it was well plowed
and harrowed and the ground was mellow and fine as
could be desired but unaccountably the corn failed to
make a satisfactory growth and only stood upon the same
kind of land with about the same result his counsel and
help find about come to the conclusion that ^{they} could have too
much or ^{possibly mixed with} ~~too much~~ the corn cannot be the cause believe if
not, the kind of the plowing it must have been better
to give it a hand given the comparative yield of white and
yellow corn would say his experience would conclude or
that must be a better yield of the white is concluded that it
weighs no heavier as the yellow and for planting and
maturing purposes he sees no difference
It is said to replant corn where the soil is more
discharge the first stand as they will continue their action in

Dr. J. A. Johnson would not like to admit that he had learned nothing for the space that was occupied by the last year's growth of his experience had been in another line than that of agriculture, but had a little in that and just as to keeping warm there is more than keeping the weeds down as a member had suggested but by keeping the ground well and frequently stirred it retains moisture better and is in a better situation for airtiness, to retain and absorb from the atmosphere than what it is not thus well cultivated if you ~~take~~ take a look in your garden thoroughly stirring and pulverizing the soil meaning that but well stirred almost as if there had been rain while the ground not so stirred will have the same appearance of dryness it had the day previous. Another thing is important part in both the vegetable and animal kingdoms at least $\frac{1}{2}$ of their weight is water and what can we can do to give it to growing ^{vegetables} in quantities sufficient for their requirements will promote their growth. Last spring commenced transplanting bringing let down to work with diggers took much as a day with them and found that they are getting along at very slow rate and not produced yet to be used the soil they had seen them no coming more fast. They found them the previous and to a come to this conclusion that if you have some weeks work with the soil the weather looks as if should it be to do some work you will be able to do in the week will save than pay for the good but can what you could do with an inferior soil or only a great amount be industrially disposing of a portion. George Gould has been that he had not much trouble he said some years ago that George had to the West it is to be true though as to the error of producing crops in winter. There had been an experience in this regard which corroborated his statement ^{after} a warm day in February there was a heavy ^{of} winter wind and there was not one exception every vine was killed to the ground and often shooting below the ground in this case it was not a knowledge as the vines being young were not in bearing and they generally put up a strong shoot

that had a vigorous growth the past summer which was
only an advantage & sort of it does not bearing
down the fruitage of the fall season would have been changed
believe that the winter increasing of bearing time in
winter would be hazardous as there are whom properly
timed but 2000 bearing buds left to be sure and that
the frost is likely to run down the open pores almost
any so as to kill the vines for their length

Dr. H. Armstrong, must hold by his past experience that it
is far better to ripen - for some when one crop is making
thru to ripen with them but perhaps the better way is
to plant very early so that your corn gets far larger before
the cold storm catches as when very late, so that the
season is perfect and they have become a little, when is
calling down of our soil some but very little of
anything to do with them think and it changes this
other and different times that you have changed the soil of the
new month in the history of our country and in the action
of old people for the great of every month of year this country
was first settled in Wayne County and their town was killed
when in coming war and they is it to you of the town
for their bread and feed than the country was at in
forest. As he found timber and being to have some
some mistake a mistake his way and to have an entrance to
J. Bushnell, it will be recalled that but a little he had not
something in person of this power and, and it is with
grain that timber was becoming scarce. It will be recalled
that found that then changed that there was a plenty of the
abundance was glad that he got looking at it through
a different way and that he is now is turned to my belief
believe that I now that I planted it, not liable to be
by the fact to come, but there is no getting there of the
grain before except not to let the timber stand about the
purchase nor allow any one else to if you can prevent it, they
are our very best friends

Passion for soil improve and a particular to attend to the small
products of the farm. W. J. H. Lloyd follows and joined to
and in one track.

of 5 4 18 40

I have for some time had of Hamilton Township
 a specimen of brown and white of a large size and in
 a fine condition of last season and have expressed
 interest for this season as it is probable to attend to
 the small products of the farm. I have of the Boyd
 the Boyd had never given this subject much of any
 thought until it had been brought as one for the consid-
 -eration of the Club. Women of his family had for the past
 year taken charge of this department. Both when he had
 come to look up statistics he found that in the
 best he had placed entirely too low and when
 he was asked in regard to the small products of our
 farms from our last meeting he has imitated inquiries, and
 at last other data as we are capable with reference to
 one of the small products of the farm, milk, and eggs
 and has found that as soon as an estimate can be
 given. ~~Substantiated~~ Scotland Co produces and sells 531,898 lbs
 of a year now at 17 ct per pound which is an average of
 more the money value is \$90,423.66. Take Scotland Co as an
 standard by which to estimate the stock of Ohio and we
 will find that the State produces 32,524,258 and at 17 ct per
 pound will amount to \$5,529,328. Now if we take calculation
 to estimate the egg production as equal to that of butter
 that is, 1/2 of eggs for pounds of butter, that we will
 make the joint production of butter and eggs an estimate of
 \$186,942 we can better understand the proportion of the small
 products of the farm if we compare them with one of the
 and what is regarded as one the large products of the farm
 wheat. Scotland Co may be set down as producing more for
 187,878 bushels there is some difficulty in giving an average
 price for bushel but for hope \$1.25 it would approximate very
 close to it for a term of years this would make it value in
 Scotland Co \$237,842 Now the difference of raising or
 cultivating a wheat crop is fully one half the value
 raising a crop of 186,942 Now we have shown
 that the butter and egg products of our county and to
 the \$186,942 for the difference incident to their production
 is \$186,942 we would have to look at all crops for the

purpose than the better product and they cost them-
 selves not only pay for the cost of keeping but even
 a profit over this without taking account of the receipt
 for better so receiving in this light we have the better
 is clear profit now of 8 pps it may sound ridiculous
 almost spontaneously. our poultry for the first part is
 expected to make their own sustenance without our giving them
 is thought in our effort to gather their themselves and our
 Thanksgiving Christmas and New Years as one of the expenses
 that go to make the good Thanksgiving of these poor small
 products. They found in profits to be ~~the~~ greater than
 one of our large ones with the comparison I will
 make for all. Members to contribute to expenses of our
 small products with other things -

It is difficult to have a view of their subject that amounts
 to more than dollars and cents and that the benefit
 of living in the enjoyment of the small products of our farms.
 Many of them are not business. But let there be ~~any~~
 no objection and any one may purchase the ~~same~~ ~~same~~ ~~same~~
 notice that these farmers that have paid attention to their
 small products and paid their store bills as they went along
 in these small things are the ones that have succeeded best
 and that their prosperity has been measured by this. It is
 attending to these small matters - while those that
 make accounts of paying to pay their end of the large product
 some often trouble in making their expenditures carefully.
 But I have been one of the number that have been ~~in~~
 in small things that is a not broad way better to go in
 my pocket than others when it comes to the business of
 my children amongst me by hand is among my young ones
 I put rid of every one of them distant friends together left to
 make me in the morning by last evening. I am afraid that
 made more multiplying just in my grounds and among
 myself more damage than the children and when we
 kind of return for their destruction, was my willing to spare
 of it. I have again to defend my rights and but I am
 for in for it. I feel that I am not alone.

the truth and that you may be able to select the most
 profitable sort of sort all of the leading breeds make
 good dogs to do service that one of no particular breed
 of good compact well made dog with a gentle disposition
 not too large and coarse or small and tender but whole
 and bred with a view to having a good dog that will
 rather at any age is just what is wanted by most persons
 has directed his attention to the clubs which more particularly
 has given his views to the club. At a previous meeting and
 he gave in course to change his opinion of this good qualities
 the character qualities of this breed are length and depth
 of carcass breadth of back small bone very small head
 in comparison with size a carcass of all bones and light
 well formed having little or no neck having few distinct
 straight back and mostly straight but occasionally having a
 hump or hump made to weigh 100 lb and 1 to 100 lb is very
 common at two years old he has had four ~~shown~~ ^{shown} with
 that a round skull had little of common legs but
 have 4 legs closer than those seen in the same lot with
 the clubs and find the same case in all respects they are
 now over one year old and will not average more than
 120 to 140 lb. For breeding purposes ^{breeders} should be
 of pure blood born over a division from
 straight line degenerating with common and coarse
 wider and wider and with skulls broad to a more like
 long heads when bred to longer head make will very
 a mostly perfect stock equal to the full blooded
 sort of body bred upon both sides are just for
 breeding purposes there appearing with all particular to be
 superior to the parent stock have tendency to run back
 to original the wild boar, the dog that like dogs
 like you, looks good with pure breeds. Almost every
 man has his favorite breed of dogs and the same
 sort of dog will not answer every man's wants or way
 looking care of them from him to want a dog that
 will consume the most corn with the least trouble
 and of course the most perfect while others who are
 not so stingy of their corn and attention of the dog,

prefer one that will make the most pork from
 a bushel of corn in the shortest time of so take
 the Chester white by all means. There is a breed of swine
 bred of pigs and all of them have their pride the
 would name some of the most prominent. Shropshire
 China Suffolk Middlesex Lincolnshire Berkshire and
 Chester white among these are good but better and
 better than all some of them breed are black some white
 those favorable to the black hog claim they are not so
 liable to skin disease as the white from my observation
 the only difference in this respect is that the white by
 the disease is more readily seen than in the black -
 both being equally subject to it when not properly cared
 for the Berkshire are decidedly the best breed for the
 western and northwestern states but surpassed by the Chester
 white in the east and the southern states - the Berkshires are
 very prolific and the fast progress in the north and
 will stand more neglect and heat longer than any other
 breed. The fine blooded Suffolk will make as much
 pork from a bushel of corn in the Chester white they will
 do better on grass than any other breed the Chester spotted
 are excellent pasture will mature at maturity at very early age
 and take on flesh with rapidity at an early age they are
 very docile and easily managed would be a good breed for
 sheep raisers as they would be left liberty to range the sheep
 than any other breed of pigs a pure Suffolk is nearly sterile
 if pure and consequently cannot stand the rigors of either
 heat or cold. Breeding of pure animals will succeed as
 much as modern is in ~~the~~ and only company does it
 will and stand well in disappointment - as to in and in
 breeding in pigs there is more unanimity of opinion
 among those entitled to credit as breeders than among
 breeders of any other kind of stock. I will refer you
 to experience of several who stand high as breeders of
 Hogs and whose authority stands unquestioned.
 Dr Brown a great and successful breeder of Staffordshires
 says that without change of blood of a different kind of
 the pure breed constitution cannot be preserved.

Geiser Hobbs the owner of the celebrated improved offspring
 owned his stock with three families by
 which he maintained the breed for twenty five years by
 judicious selection from the different families others
 that have tried the breed in and in breeding have been
 testimony that the general constitution was good or seriously
 impaired the standard form is destroyed but especially the
 reproduction functions were seriously affected.

The best or most successful breeder gives this advice in
 which I partly concur. In large crops of swine will be
 profit to the farmer as you get more constitution and
 earlier growth. I would recommend the farmer to keep as
 'Acres as circumstances his herds of some successful breeder
 and willing to pay good prices for the best breeds and
 breed from none other but always from the same family
 if they were generally the same we would soon have plenty
 of hogs with the shell of a bottom a buckwheat or better
 or an standard with a stock of hogs with which you
 could challenge competition with the world. because
 talent must be used when there is a remunerative demand
 for it.

Mr. F. H. Boyd did not expect to be called upon
 but would say that he heartily concurred in all the opinion
 and said in reference to in and in breeding, he well
 convinced on the injurious effects of this kind of breeding
 that I have never felt like trying the experiment.
 There are great many good breeds of hogs the Chester
 white is one that seems to do well in close quarters of
 lots I have become an admirer of the Poland China
 and from what little I have seen of them believe that
 the probabilities are in their favor for becoming the popular
 hog. I could not see the force of the lecturer's advice for
 a different kind of hog for different sections the same
 hog I take it that would be profitable for the southwest
 where there feed is high the home would be profitable
 in other where grain is a low price and further west where
 grain is still lower it must still be the hog for profit
 In some of our western States they are fed largely by fattening

that are fed corn in the ear in this way it does not seem to cost much for their keep but when we have to feed them on whole grain think rather expensive and that we are seldom remunerated for ^{most} hog have not had that experience in soaked feed that would warrant me in forming any ^{conclusion} as to whether it would be more economical.

Mr J. Stafford had not thought or expected to say anything this evening, but would briefly give his experience as corroborative of the history of the evening. He at one point a stroke of shade which exposed with the Kafirina Bush and surrounded them a superior hog bred by in and in breeding some of the finest generation hardly new enough to eat have had a litter of 18 pigs from Mrs Hope Chester while some that have turned out very satisfactory. 4 of them he says he weighs 150 lbs each at 6 months old as to the side to hand from it had to make choice upon which side I would have the full blood it would be the mother and never die.

Dr J. Gorman. Think we are getting quite porkish this evening; more so than our health ~~and~~ ^{and} people of an exacting much for either would warrant us to be the fact is we raise a much pork and what is still worse we eat a much more than most prominent characteristic of the species that men approximate in disposition disposition and general character. The animals upon whose flesh the subject is made prominent part of their diet without the more that make the hog however improved by the art of the butcher or cooking a prominent part of his subsistence will inevitably become like the hog in his traits of character. he will rapidly acquire a low growing disposition a sturdiness that can neither be cramped or shown. I am acquainted with a man that breeds that eats 100 pounds of pork every year and I am very certain that he is the most perfect specimen of the man ^{very perfect} ^{the best} ~~perfect~~ ^{the best} that they partake of the disposition but the ~~circumstances~~ ^{circumstances} in a few generations the breed of the hogs when ~~these~~ ^{these} they are like the Chinese hog or personal description of this kind of hog would very accurately describe the Chinese man in the flesh with kind obnoxious prohibitions on

and about the digestion arguing with a cucumber in the
 of the stomach and the moral character is marked with a
 consistency and stubbornness that can only find its counterpart
 in the China hog; for the want of other means of transportation
 in China any thing is carried in basket on men shoulders
 now the way they get a China pig into the basket they let
 the basket down before him they then take pig by the tail
 and try to pull him backward his nature stubborn makes
 always try to go the other way from what he thinks you want
 to do he runs into the basket under the impression that he
 is wanted to go backwards and away from it (The farmer
 did not show an effort to carry it out as an analogy for the Chinese)
 The Wild pig is the most domestic animal of which we have any
 knowledge it comes to market in the poorest corner of the poorest
 part and the balance of the family have to go hungry, pig part
 not and it always figures as the chief personage in the feast
 market, but the Dutch hog would not suit us it is too
 large and coarse the China hog is at the other extreme too
 small and poor. There are a great many breeds of hogs with
 interested parties advocating their merits arguing their merits
 whether they have them or not the opinion this evening has been
 doing some puffing for the Chester Whites so far as my
 observation goes they come the nearest having no good example
 of anything I have ever seen have best them and they have
 all kinds of signs and shapes some with great top ears some
 ears standing up some short and some curl, having showing
 to any one disinterested that they had no good standard setting
 to be relied to know what you would like get what feed from
 the stock the head is the only part that you may expect to find
 any uniformity in and it is more standardized than the form
 or any other part of the hog. The Jersey hog has more uniformity
 than any breed I have noticed the pigs of any better running family
 any in size or general appearance this breed is made over
 out the way Chester have been selected. The Bedford the
 very largest class of the old breed the Large China the best
 feed for fattening and the Sheshire with their strong constitution
 and symmetry is now very extensively bred to have been taken
 into account in trying to make the the standard breed

I should have to agree with you if the Chester White is certainly the hog that will make the most good pork or bunch of corn. The water has certainly been obtained somewhere. This description does not answer to the character of the Chester White there has been some story among the stock say what you will the Chester has much if not more uniformity than any other breed and I have had the best of the Berkshire that I put to have kept in the pen for 13 months and put them out and they did not average more than 250 & 200 lb. the others with him can not put I believe would have doubled this some people using their lungs I am down upon all kind of Range Reluctant Hogs, Religious Hogs, local variety Hogs and Hogs in large herds.

As to Stomachs not much of a big raise but it is a large and important business in our country believe that it has become so large to be anything as paying over the whole is 10¢ per bush for one bush of corn this I suppose will operate with highly stock very early to the fact and would be left to have calculations upon at this rate and price of pork the past fall and winter we are only paying 3¢ to 35¢ per over corn. The theory advanced this morning looking back all fixed on the whole for good qualities in stock is an error that will be corrected the correct system is a large female and small male for breeding I am if either are to be large it should be the sow. The Chester Whites that have to be highly prized have always seemed to have wanting in herds with their great legs rare. Now that their friends claim they cannot see where they are going but the man that cannot see where he is going and the one that does not know are about alike. Unfortunately have had the Berkshires they are with a male and not discount on their intelligence for want of light or senses had 7 mos pig that weigh 180 lb. There is often mistake made with pigs in feeding them corn this kind of feed is not calculated to promote the growth of them and immaturity their food should be more largely constituted of Oats, Hay, and Milk. White hogs are objectionable on the score of becoming mangy. Black are not liable to this disease.

Mr Boyd one part of the subject seems not to have been
 properly touched this evening the best method of raising
 in the remarks of members this evening the chest white have
 been recommended at least I have never seen one a part
 blood that would answer the objectionable description given
 The principle that we should breed to good size I believe
 to be the true one. The male being the stronger is more
 likely to impart his traits good or bad to the progeny than
 the female in breeding sheep if you take the long long wool
 kinds as Leicester or Cotswold Bucks with fine lines the very
 specimens will almost equal the size of the ~~average~~ of male breed
 and about two or three generations will make the fully sized
 breed in the other way the fine stock is long would run the change
 is not so marked but still the run is generally to fine and will
 keep in this line so long as you breed to fine Bucks of pure
 blood but if you put half blood or any grade of blood together
 for breeding purposes they will then run toward the inferior stock
 thus when we breed for improvement we should breed to strong
 good male

of Lybriest. It is astonishing the improvement that has
 taken place in dogs in this neighborhood in the last
 10 years 15 years ago I think there could not have been
 found in this country a throw that would have away
 to the one I weighed a few days since ^{the} animal
 London was white. ^{the} do not like black or spotted dogs to
 have favorites ~~at some time~~ they were entirely to active would
 not up like the ~~same~~ entirely to house just as to manage
 well or not. Mr. have weighed some very heavy black dogs

Mr T. knowing does seem to me the most important part
 of the subject is left untouched the best method of raising
 dogs this would embrace as should or selection of breeds
 there are differences in every litter of pups and might be
 not by judicious selections and crosses that a variation
 breeds that would equal Chester White Holm Chines or any
 other breed there is no doubt but many a good pup are
 raised by feeding improper food and what would be
 the policy in procuring the very best breed of by feeding in

any way we should dwarf and stunt their growth

I expect you have had ~~hogs~~ swine out at the same time and blood chatters the chatters made the largest hogs

Question for Sept 2nd 1871 The best method of raising and the best age to sell hogs ...
 Dr. J. B. Smith
 J. Bushnell Vice President

Farmer Club of Vermillion Township Sept 1st 1871
 J. Bushnell Vice President in the chair. Minutes of last year read and approved. Subject for discussion the best method of raising and the best age to sell hogs. Mr. D. Boyd lectured. Mr. Boyd not present. Chairman called upon Dr. H. D. Smith to open the discussion.

Dr. H. D. Smith. The best method of raising hogs appears to be the first part of the question. Some farmers maintain for a few years upon the system of giving the pig feed the best all they can eat to as to make them weigh at ten months old from 250 to 300 pounds. Some at present maintain that will weigh from 250 to 300 pounds. Some perhaps grow this much at 10 months old pigs should not be fed corn for some time but with oats or barley or feed that is common that gradually makes some kind of food the muscular tissue comes in place and is perhaps the best thing we can feed for fattening purposes. (In answer to question) we would not feed stock as substituted, as particularly in kind to say that we would not feed corn all they would eat from the start but the kind that is best adapted to promote growth and enough to keep up the growth without fattening. Young animals will take on flesh faster than old ones will gain faster than stags, digesting and assimilating more perfectly and for the same grain fed to young animals will give the farmer a larger return in profits than if he fed it to old. The subject of sending so much to France the return upon the last year's feed applied to in word in breeding. But some perhaps the best method has been found a course of them in and in feeding and have often

By the way I even thought one had about enough of the
 hog in the last evening, but the last that I thought
 differently and to satisfy the members would stay by night with
 the animal through. The hog is about the only animal in
 life here that is of no practical benefit to man either house
 and trap and other animals have many purposes and comfort
 which living to take I believe there is nothing made in vain
 and the hog being of no benefit to man while alive
 we make sport to make his utility and benefit when
 dead and to make a remuneration for his care and sustenance.
 I must have been designedly paid and it gave a nice
 evening for even in our villages and even among the poor
 ones of society families can find sport and entertainment
 to take and to take pleasure to keep one to live in these
 days and keep them growing upon what with them
 could be a waste when we take into account the present
 state of the world in only the state of affairs it is a matter
 of great deal of importance in fact a big thing
 now is something in breeds of hogs in being stock
 and society benefited and breeding stock we should select
 from breeds easily managed when we have got the
 kind of to be by should be the it that they are well from
 the point on with and to be born and they should
 be to be confined in a pen but should run upon their
 own space will help develop the muscular system and
 it is preferable that they be well developed to be at
 home. Following the pork perhaps to get a full description
 of the it will be best to keep them until they are
 about two years old then it is necessary to know
 a kind of good we should give them to produce any
 kind of good nitrogenous food being the kind that
 makes bone and muscle and if we wish to promote growth
 we should give with the kinds of food that contain the
 largest amount of nitrogen. Nitrogenous food is the kind
 and give to keep up the animal feed and develop the
 nitrogen we will know the amount of nitrogen does not
 vary either with the warmest day of summer or the coldest
 day of winter it will remain the same at the equator or in Greenland

but some amount of food is not required to keep up the amount lost in excretion as in respiration and elaboration of a surplus of food containing no nitrogen over keeping up the amount lost. This balance goes to development of the fat, tissue and should always be understood that the animal must first be supplied before the fattening process can take place. Hence the importance of fattening any animal that we wish to fatten in warm or mild weather as it will take much less to accomplish it than in cold weather by keeping large of large breed until they are fairly developed or have got their growth if we wish to produce a certain number of pounds of pork they will take less time to raise for them than to produce the same number of pounds with smaller large hog or large of 200 pounds each with only half the value and nothing like the amount of feed that will be required for 40 head of 200 pounds each and if we were feeding in cold weather than in warm weather it would be cheaper for the best to say I am the best I could select there is something in good breed there is more in keep the feed brought well filled down but it gets empty and your hogs will come out all right if the breed should not be just perfection you may take perfect balance of calf and put it with you that is an extra matter and it will soon develop all the good points of a fine animal if you bring from the rich blue grass pastures of Kentucky some of their fine dark horn stock and place in our poorer pastures they will soon degenerate and you know if you take our poorer to this same blue grass region they commence improving and in few generations will rival the celebrated dark horn Stamaton not only has an injurious effect upon animals but as well upon the human race the Irish man once being a stout man has become degenerate to a state that will scarcely survive & first as to the best time to sell hogs have often seen them sold when about half fat this has always seemed to me the wrong time except it should turn out that the best is much larger price than he could have got when they were fatter and as the best half can put on with much less expense of feed than the best

W. J. J. Grubill does not believe that pigs &c raise hogs if you do entirely with grain had much better sell the grain a limited number can be kept by a family and feed from the waste of the house and dairy that will cost more than they will bring or where they are kept on a larger scale and any profit to be expected from it they must be kept on clover during its season by keeping on this way there is sometimes a profit in their raising but as far as feeding hogs for profit I have always been able to make more out of my grain by feeding cattle had a cow the past season that fattened well but she eat a great amount of corn could take it down about as fast as corn sheller feed me lot of hogs that gained from 2 to 4 each per day the past fall feed another but when they were partly fattened found that they were at about a stand still in the way of increase weight then and found that in two weeks they only gained one pound kept them two weeks longer again and found they had lost 30 pounds in returning them found the corn did great ~~thing~~ to be something wanting in their food (in corn & grain) believe the usual calculation of 10 lbs of corn for 100 pounds of pork with thirty hogs to be about correct for if corn is 12 cts and pork 20 per 100 lb you get about the market value of the corn there is something in breed of hogs always take a white hog, but think there is more in feed than breed.

Mr. H. Gleason has never raised hogs to my knowledge previous from having them dropped at the young season to make hogs as should have the pigs come about the end of March and by good keep they should be made to weigh by the holidays from 20 to 25 pounds when we have to keep hogs over winter until they are 18 months or 2 years old they certainly cost us twice as much as those raised in the summer I have suggested many times been dissented so that I could turn upon clover but have no doubt about its being a profitable way of raising and the best expensive method we can call it I have kept some of the same experience as Mr. Grubill with hogs eating good and where they take to this the more they are dropped of the better.

I never tried myself in any other things but have never been able to discover what they were in fact of or what their systems required a lesson it is profitable to sell thrifty hogs when half fattened unless you are very certain you are getting a much larger price for them than you could when they are fattened out.

I don't hope that understanding fully the question for our last meeting, not being present when it was debated placed upon it as between the ~~the~~ raising was not understood as being part of the subject and feeling that I did not then fully deliver myself but that the raising and ^{feeding} selling of ~~feeding~~ hogs from perhaps my misapprehension is left for discussion this evening. Now in raising hogs it is just like every other business the first thing is to start right and you cannot start right in this business without knowing something of the laws of nature the first thing of importance is the breed now then there are a great many good ones but your choice from ~~the~~ ^{the} acknowledged good ones now of the you have made this choice it will not answer to keep your first sow for more than two or three litters as they almost invariably become mischievous now in selecting your ~~future~~ breeders there is a choice in the pigs of the same litter for this purpose and you should take care the sow the pig that breeds the best but the pig should be given to those that back the first and second litters and of the three the one that breeds the second should be the choice for the same principle that you select your best sow rejecting the bad and tops of the same. The mark for the selection of your breeds then comes in the raising to be properly considered now if we were to follow Dr. James' prescription we would certainly all go into bankruptcy he tells us to keep the hungry bell of swill never let it get empty the worst policy he could possibly give unless it is his finishing touch that it should be soon & here done he finds any law in nature for feeding down swill to a hog or any other animal is not the swill itself but the corn and the grass the lowest ^{feeding} when your pigs are about to mate, commence the raising do not do it suddenly but gradually.

So that neither the sow nor pigs suffer from the
 change the sow tends forward and the pigs backward
 the best way to accomplish this is with a pen with two
 apartments so that the pigs can pass from each but
 the sow be confined to one apartment then put
 feed with in the trough in the apartment in which
 she is not allowed to go but never more than the pigs
 will drink at once and if you should repeat the feeding
 in a few hours a day all the better in "few days you
 might get a little more meat or fatness in this way,
 the pigs will gradually leave the sow and she will at
 last be able to get up. I have had some experience with the pigs
 feeding them well they can eat some bread boys with him
 he claiming that his was not fit to handle any account of
 being with pig when I saw her she took to me as though
 she might have about thirty to an acre and she had just
 one the balance was all just gathered keep you enough
 full of sour milk as he recommend and you will get plenty
 of milk but very little fresh whenever we keep our pigs
 we should keep them constantly clean keep them clean of
 all dirt and filth and the warmer the air pigs in
 winter the better will breed but never with cold straw or
 straw surrounding to make them mangy when they are
 kept in a pen there should invariably be a stream of
 water in the lot without this failure is inevitable
 as to the best keep for breeding sows they should not be
 kept as they then become so stupid and lazy that they will
 not take care of their pigs nor should the other sows
 be kept of having the so poor and mangy that they will
 bring to eat their pigs when they come but should be
 kept in healthy condition and of medium flesh when they
 have young pigs and for some time previous they should not
 eat any sulphur and charcoal should be kept constantly
 I have been attempting to make some improvement in breeds
 of pigs but am not tied to anything whatever it is other
 with rather am willing to follow nature to be profitable
 but only in the way but every thing else in the farming

J. H. Boyd sent you a what little experience of his.
 And but believe that I have a better thing than profits
 and that my experience is not even as good as it might
 have been had I been conversant with that I could have
 followed out some of my theory as far as good for, &c.
 I am sure to put you there plenty but not always the same
 kind of them should be frequent changes that may, perhaps, all
 that is required for their growth would keep them in close
 close pen with open yard into which they could have
 access at pleasure at the age of three years another two or
 three are getting stronger giving a larger allowance of
 grain now I have had hope to do just like in the
 kind of treatment while I have had the same kind that
 would run to fat little strongy things that would be
 just a ball of fat. (in one or two years) kept them from
 I have neglected. I think there is a good deal in that
 about dogs running & large a very few persons in our
 neighbourhood who desire to go to some at large upon the
 roads and I have seen them that is not even a good
 have gone from their commitment to the house and that make
 in the lot or yard have no doubt but this must be the most
 economical way to have dogs when kept in pen or to
 be situated to wait themselves of this advantage, as I should
 say to sell dogs there are so many there to be taken out of
 that is, it is not very far from the house to be seen
 they make but as a rule think they should be gotten out
 the first fall I sold without saving and little more than half
 I should have expected that the price might come
 below this it was turned out in an apprehension to be
 correct and made money by selling half of the price to be raised
 In some I should have better to not control the pen just put into
 the present price of corn than to see profit at all. I think
 should make no mistake and that is to increase a feeding in time
 so that we can have them just for market & for other
 could you then do in no in some respects. As we are
 raising, at present the gain is very small it may little
 for the moment - so that it is not

as to considering the opening of the subject this evening, and
 whether unexpected as falling to my lot and as I am brief would
 claim indulgence of the club to reply briefly to some of
 your suggestions which has remarks are in the main
 well considered and important but among few good things
 he indicated some of his personal freaks in rejecting the pig that
 happens to suck the back let because a pig should suffer
 for want of a sufficient amount of food and for no other
 reason is it to operate too as breeder when the pig can take
 from the dam then unfortunately our poverty soon seems to be
 the result and its rejection for any purpose is as I said only
 a freak of the imagination Dr. Johnson's plan of giving us
 for a year to promote growth is a most singular & by best
 suggestion we have heard. Besides my close to Providence have not
 doubt it would be interesting to know just how much variation
 it would take to make a pig grow and how much to make him
 fatter and whether the exercise should be a walking trotting or running
 exercise or all combined, we should have a breed of hogs that
 with good feed we can make weigh at 40 months old
 250 pounds this thing of keeping hogs until two years old
 I have then somewhat developed is not perfectly in early days
 hogs were kept in this neighborhood until they were quite aged
 and it did not seem to develop the temperamental very
 noticeably as it was currently reported that they would go through
 the same state for 4 or 5 years

To Burlington The best breeds of hogs at present are not strictly
 pure breeds but compounds made by crossing different
 breeds the Chester white the D. G. or Poland China have all been
 mixed in this there are good many good breeds but in raising
 & raising great care and management to keep them up to the standard
 of excellence in particular if you get a good fruit it is very
 matter to maintain the standard of any fruit of want a perfect
 a Northern or Western apple or a Northern ^{one} all you have to do is to
 graft if you want a Concord or Hartford ^{one} you get the chosen kind
 of fruit by layers or cutting from their vines but if you
 attempt to follow the lanes of Nature by seeds will not
 satisfy you the same by seeds or get a mixture of
 and you shall of hogs pure we have to follow the lanes of

nature to choose for grafting or breeding or propagation by layers
 some of the best from proper selections on both sides we
 are certain of getting a progeny equal to the parentage but
 we make crosses with spruce the stock is certain to degenerate
 when they are sowed & it is like the chestnut white pine, &
 they are chiefly grown & will grow to a large size and fall at
 very early age. As to carrying for large money business are in the habit
 of keeping them on blank flowers we have seen them kept in
 this way until their feet become deformed. This method
 is unnatural and expensive they should be prevented to come
 upon graft or its disease and in open lot at other seasons
 they select about the proper age to kill. It is a hard thing
 to keep in the spring and kept over winter and sold the
 fall or winter before they come two years old.

Mr. & Thompson have pigs that are mangy have kept in
 clean open yard would be good for cures & remedy.

To top the pores on the front legs after having shaved
 and hair will produce the remedy is soap and water
 give them a good washing with this and thoroughly rub the
 inside of front legs then give them a little of clean skin
 fat mixed with them.

Subject for next session

Cattle raising for carrying & trading J. & Grubbs letter

Farmers Club of Hamilton Township session of April 14/1873
 J. Grubbs Vice President in the chair. Minutes read and approved
 Question for discussion. Cattle for carrying & trading.

J. S. Grubbs. Mr. Grubbs thoughtfully thinks that every farmer
 can have a speech from upon this or any other
 subject. I believe there is a profit in raising cattle
 that is better for us when we have calves to raise than
 than to slaughter them as well for that purpose as
 the calves we have from cows that are raising for
 family use can be started on their milk that within
 would be nearly a waste do not believe it would
 be profitable to have cows and make a specialty of
 raising calves but as a few cows are necessary in
 every farmers family to raise their calves we will be

at three years, off from \$30 to \$50 and I think this would pay a perfect ~~adapted~~ two years they will only take a small amount of pasture or winter keep and if we should feed them out the winter after the calves three years old they will bring us from \$60 to \$80 I sold a lot which were weighed yesterday of this age and they came to \$72 per head when now have small farms and plenty of hay to help do or believe that cattle raising would be as profitable as grain but if any person has to do their farming, hired help almost any kind of stock is preferable to hiring home a very poor reason of hired help upon our farms - being profitable I have purchased and fed a good many cattle at different times and they have always been profitable the last I have just sold being a fair sample of increase in weight I have thought that the figures showing their increase of weight would be the most instructive thing I could furnish purchased them last spring at that time the average weight was 964 pounds I did not weigh again until the 25th October then average weight was 1244 pounds or an average gain of 280 pounds I have begun to feed for fallowing and on 23 November weighed again the average gain was only 18 pounds ^{remark} here that the first month after coming from grass to dry, ~~shows~~ shows them but a slight gain and the same is true when you turn, viz. spring from the dry feed to pasture they often seem to get lighter for two or three weeks I weighed again on the 11th of January ^{11th of January} and the average gain was 61 pounds from 14 they had gained an average of 29 pounds the entire gain from August to January 25th a feed - In January I think it an important thing to look after and care for the calves and that class of men that love their race so much and like to sell to it crop land beside a warm stove had better look up some other business than farming, (in some to question) would take the calf from Mother quite young and as soon as the milk becomes fat for use they are much easier learned to feed than when they get older so for us raising cattle for drying do not think it profitable to raise them for the price the growers pay for

face them if we have buyers more than we need for
 cows for family, the better place would be to put
 for the butcher as, we could get very nearly double the
 price for them that these northern men would be willing
 to give us for them they sell them off in the fall.
 Expecting to buy from us in the Spring for about what
 the get for them in the fall so that we would be
 wintering them for nothing and they are very careful not
 buy them until the time that they are likely to become profitable.
 With respect to this being the first paper I have had an
 opportunity of attending this winter I feel that in being
 about I have gained pleasure and profit. I have only
 been engaged in farming for a very few years and of course
 have not had the experience that would be necessary to qualify
 for instruction did it know even the subject in all its
 details had read it so that I had an opportunity of
 any preparation by reading or previous thought. There are a
 quite a number of breeds of cattle and they are kept up
 mostly for special purposes. Durham knows Yorkshire
 Alderney all are their relatives for some quality well re-
 spected but among all the breeds the Durham and their
 grades are acknowledged to be the best for following
 purposes and this in feeding cattle for the butcher would
 seem to be an important item in striving to get the right
 kind of cattle for feeding. Within my recollection there
 has been a great improvement in this respect recent years
 well when W. H. and others brought Durhams from Kentucky
 into this neighborhood and from that time the cattle in our
 community have become much better. The prices had some of
 this stock usually let the calves run with cows and frequently
 sold males 6 mos & 1 year old from \$200 to \$250 and when
 kept as steers they would bring at 2 to 3 years old from
 \$10 to \$15 dollars per head more than natives of the
 same age. I have secured a pair of the grades
 the year better and are much more attractive in
 appearance than the natives that were then raised
 with them with the same care and feed.

L. J. D. says would have proposed that ^{two} other breeders had been
 called for with more experience than I have with cattle
 but even on this account shall not shrink or shrink from
 consulting my Smith however small to the general stock
 of information would that by introducing the lecture of
 the evening with statistics of facts and figures as being
 if for their importance than volumes of mere theory
 on them in his figures of increase of ^{weight} standards by which
 the same kind of management we may hope to be benefited
 to & only hope, feel confident of accomplishing; his suggestion
 is to cattle not increasing in weight for the first month or
 at least but a slight gain and the same thing occurring again
 when turned upon grass in the spring the spring pasture to
 increase for a time may be accounted by the fact perhaps
 of the grass in early growth being soft and juicy and not
 a temptation as it is when it gets more age the softness causing
 discomfort and a refinement of the stomach but the same would
 not hold good for the change in the fall as by his showing
 upon the same kind of food the first month there was
 not a slight gain while the second showed a large loss
 perhaps the change from green to dry food would account
 for it it would seem to be a matter that should be watched
 in some way perhaps to commence feeding hay a month
 or two before you take off the grass the kind of food
 which you intend to follow the change would be more
 gradual and the gain the first month after they had with
 winter hay would not be so much less than the preceding
 months. or commencing to feeding cattle as in any other
 commencing right is the time that will save you on to
 decrease you cannot make a profit by raising or buying
 a husbandry for raising purposes but a live cow compact
 animal is to be intended and no one understands those good points
 better than the butcher after you have got your stock and
 commence feeding regularly in time is of great importance
 & a reminder of time you may put on some time
 some or often let ^{carefully} be there about the same
 time of each day they will look for and become
 easy and content if they do not get there just at the

[illegible]

[illegible]

but the cars can find them the most, but this is never required
for more than a day or two, and then it is not required
but the cars in this case

Dr J. J. Freeman. This subject of feeding cattle is perhaps the most important subject that ever comes before a farmer their feedings Cattle in Europe is regarded of more importance than any other branch of agriculture the question there is not how many quarters of grain are raised to an acre but how many hundred pounds of flesh in this way they keep up the standard fertility of their land our native cattle would be regarded only in the light of being in the past as sort of surplus, as it at the present time where they ^{are} less the surplus of the East. There is no longer a Plymouth veteran for raising inferior stock the native cattle do not pay for the raising ~~stock~~ from a profit farmers in raising stock should be governed by the same principle that governs the laws of trade in other occupations. The merchant that understands his business will purchase only that kind of goods that are most saleable and those that will pay him the largest profit. in cattle to maintain the profit in cattle whether in drying or feeding there should be an account kept with the cattle they should be charged with all expenses incident in purchase and keep and credits with sales if they show a loss it may fairly be accounted for that we have either the wrong kind of cattle or that there is some error in the management now in raising or purchasing cattle we should have an object in view or rather should raise or purchase with reference to ^{the} use we expect to make of them for butchers use the Durham is pretty reliable the best there have been attempts to establish grades of cattle that should be alike good for all purposes so far they have all been failures so that if we want cattle for special purposes we have to take the breed that have become adapted and renowned for possessing special qualities the Durham as before stated because the nearest to perfection for fattening the Anglian for drying and the Alderney or Jersey for butter. It is just as easy to get a breed for any desired purpose as it is for the potter to mould the clay into any desired form or article, in some countries sheep take on considerable a great quantity and they breed in some countries the largest & best to the

only feed twice a day the second time about 4 o'clock in the evening in comparison with feeding sheep so that we required to require about the same amount of pasturage and feed that we then will require last spring after having sheep suitable for feeding could have been purchased for \$5 per head they would now bring about \$6 so that the property would have earned but little between the two kinds of stock as the cattle paid a but a little over \$80 per head that I would rather feed and care for 20 head of cattle than 200 head of sheep have never fed sheep but there was a loss by having have fed some hundreds of cattle and have never lost one

Mr. Weston resolved that the two corresponding secretaries appointed to furnish copies of minutes for publication when approved should be J. J. Jones and W. W. Armstrong

Subject for next topic The weather and the human system to be given, proposed to meet in one week

W. W. Armstrong

I think should see to it

At a meeting of the Vermont Township Union of Jan 28th 1871
J. B. Bennett Vice Pres in chair Minutes of last topic read and approved
Subject for this evening The weather & the human system

W. W. Armstrong lectured the last evening was the first topic he had attend this winter and was rather taken by surprise when the secretary announced his name as lecturer for this meeting but have always regarded that when we associate with others to accomplish any purpose that duty regards it as duty to fulfill to best of our ability the obligations and duties that may be connected with the association

The weather and the human being the subject for discussion this evening have thought best to join the same that tend to make what we call weather - the changes of atmosphere changes of the air we breathe is nearly all that there is in the term weather and to consider this subject properly we should first consider the atmosphere or air we find that it is composed of four constituents Oxygen and Nitrogen and Water vapor of these constituents Nitrogen is greater but oxygen the more principal without them there be no life of animal or plant the nitrogen merely disposes or supports the oxygen by it

by its union with it. The atmosphere has weight its weight is found 18 pounds to square inch some of the mountains of the Andes and others present having a considerable personal intensity are subject to several barometric pressure in any situation that they may be placed while men of smaller stature are easily burdened in proportion to their size. The air is elastic a capsule of being compressed and expanded if you take and pinch a ball full of air with air you can reduce the size of the ball by pressure heat will expand it make it lighter while cold will contract and make it heavier. The air is of greater density upon the lowest portions of the earth's surface as you rise from the ocean land the more rarefied the thinner the atmosphere becomes and when persons ascend in balloons or climb very high mountains they find it difficult in breathing and great altitudes even the blood is forced from the lowest vessels as we pretty well see on the mountain surface long between the Allegheny and the mountains and the great water shed that divides the waters that flow into the gulf of Mexico and the great lakes of the north that attains an altitude of nearly ten miles in fact every thing is due to the climate. The weather is characterized strikingly in masses situated in the desert zone yet as the climate of the desert is so different and varied from the sea coast it is an even rising down with all the points of the forest zone the common plain showing the orange the brown and indigo plant on the table land ^{at the base} by the climate of the temperate zone with timber the oak the chestnut the grain wheat the orange and peaches then upon the high peaks of the cordilleras is the frigid zone where the snow and the river melts. Another point the atmosphere along contains more or ^{less} moisture derived from the earth's surface particularly those portions of it covered with water by the process of evaporation. The higher the temperature of the air the more moisture it is capable of retaining at 32° F it will hold only half of its own weight of water before white - 63° F it will retain 1 time as much two of its own weight the earth gives out incredible quantities of moisture by evaporation sufficient more than an acre of ground apparently parched by the sun sends forth into the air over 5000 gallons in 24 hours. of course much greater quantities are evaporated from a moist soil.

and from surfaces covered with water the amount of the vapor or steam
 around with the atmosphere is much greater in the latter zone than
 the temperature and much greater in the former than in the
 frozen zone because the vapor or steam comes in contact with
 any colder surface or colder strata of atmosphere. ^{It is condensed} ~~they are condensed~~
 or forced together. This is the cause of fog and clouds, which in
 fact, respecting its position to the atmosphere and ~~it being colder~~
 the position is ~~condensed~~ near the surface of the earth and forms
 visible in the form of fog or clouds fog and clouds being the
 same thing the first being near or on the surface of the earth and
 clouds occupy the higher strata of the atmosphere. They are
 produced by the substance upon which it evaporates being colder
 than the atmosphere that surrounds them. There is more abundant
 evaporation during calm, nights. It is generally more plentiful in spring and
 autumn than in summer because the difference between the temperature
 of day and night is greater in those seasons. The quantity of the
 precipitated or deposited bodies depends much upon these notions.
 These grass and leaves will frequently be found, but very with slight
 drops of water the road along with will appear dry and even dusty.
 Frost is nothing more than frozen steam. We have remarked that
 fog and clouds are of the same nature. The only difference between the
 two is their height. Clouds are divided into different shapes
 the principal of which are the Nimbus the cumulus the stratus and
 the cirrus. The Nimbus or rain cloud is a dense mass of
 vapor of a leaden gray or blackish color with a light tint
 on its edges. The cumulus has the appearance of many downy white
 clouds piled ~~up~~ one on another; or a vast hemisphere with its base
 upon the horizon and peaks rising above peaks looking like large
 hills of snow when illuminated by the sun. The cumulus may be
 called the cloud of day and is an indication of fair weather.
 The stratus consists of a number of heavy white layers of clouds not
 very far from the earth's surface. During the day and
 disappearing at sunrise it may be called the cloud of night.
 The cirrus is a glassy cloud composed of fine feathery filaments
 diffused in every variety of shape. The cirrus is the lightest of
 all clouds frequently reaching and attaining as far as the
 top of the sky. While the Nimbus or rain cloud sends down
 one and half inches. The weather is called a rain or a drizzle.

Under this name of Meteorology come the winds of the
four and three kinds. Constant winds, partial winds and
changeable or variable winds. Constant winds are those that flow
throughout the year in the same direction. Of this class are
the trade winds which extend about 30° on each side of the
equator a zone of 6° near the ^{equator} ^{trade} ^{wind} ^{region} of calms being
excepted. They blow unintermittently and from the S.E. to N.W. in
the northern hemisphere and from S.E. to N.W. in the southern.
The region of the equator being more heated than the surrounding
parts, the air rising on them is rarefied and rising flows over
the cooler masses towards the poles while cold air flows from
the poles to supply the place. Were the earth stationary
the trade winds would be due north on one side of the equator
and due south on the other. The earth's diurnal revolution however
causes wind to east ^{ward} ^{ward} ^{ward} ^{ward} so far as to make the north wind southward
and the south wind northward. The zone in which the trade winds
prevail is noted for its transparent atmosphere, its uniformity of
temperature, and general beneficial impact. Columbus in his voyage
of discovery fell into one the trade winds and so well pleased that
he called it the son of the ladies. Trade winds are a little as
other regularly on the same direction at a certain season of
the year or a certain hour of the day. The land and sea
breezes are partial winds and they are produced by unequal
heating of land and water. During the day the land receives
more heat than the adjacent ocean. The rarefied air in contact
with it rises and a gentle breeze sets on from the sea which
indeed, increases to brisk gale in the middle of the day gradually
subsiding until evening and is followed by a land breeze during
the night for after sunset the land rapidly parts with the stored
heat by radiation and the air on it becoming cooler than on the
ocean causes it to supply the place of the latter when it rises in
consequence of being rarefied. If it were not for these partial
winds down the richest islands and the coast of the world would
not be inhabited by man. Variable winds are those which
are irregular as to their direction and force seldom continuing
to blow for many days together. They prevail chiefly in the
temperate and frigid zones. Cold as the north wind does
become a sort of accepted proverb and the south wind is often
called the south wind.

that the winds having their origin in the tropics should be
 the coldest ones but experience has shown us quite the reverse
 thing to fact our eastern cold winds with lowest thermometer
 have invariably been from the S.W. to within a year of 1846
 of 1843 and that we have lately experienced the wind from just this
 direction. They may be accounted for by the great statistics of the winds
 in that direction & winds from the east and west being with us large
 being ^{as much} as these intervening to destroy the temperature of the
 eastern winds the large lakes on our north we should
 materially modify the severity of our northern winds the water
 is further above sea level materially modifying the element of any
 country the ^{the} further south it is found not to be so cold
 as hundreds of miles further south but from a greater height
 above the sea level. The intensity of the wind is measured with
 an instrument called the anemometer. It consists of a small
 windmill with an index attached for measuring the number of
 revolutions made in a minute it is forced by the instrument that a
 wind to slight as hardly to stir the leaves stands at the rate of 1
 mile an hour or gentle & wind 5 miles in the same time a brisk
 gale 15 miles a high wind 30 or storm 50 or hurricane 80 or 100
 when we enquire into the economy of winds their advantages
 are visible the one moving and, and in the commerce of the
 from them and still are a great motive power to propel ships
 upon oceans seas and lakes from various regions and
 within the range of and dispose the mercantile operations
 It shakes the seeds of trees and plants far and wide where
 are not windings, ^{the} start of young saplings in their growth
 at many such distances from any trees of this description
 The common Heath having a sort of jerking appendage is
 carried far widely by the wind even about the time it comes
 into with will be in blossom the blossom furnishes the pollen
 upon flower or dust this pollen fertilizes the seed upon
 the ear to ^{the} wind are ^{the} indebted for the distribution of the
 pollen ^{and} ^{the} ^{the} of other rapid plants and fruits are
 disseminated in the same way. The air or atmosphere
 becoming full of vapor or moisture by evaporation from
 the earth it will tend to condense and no more and
 any surplus will be precipitated in the form of rain

or when two masses of damp air differing considerably
 in temperature are brought they become incapable of
 retaining the same amount of ~~moisture~~ moisture that they held
 while they remained apart. The excess is precipitated
 in rain. The vesicles of vapor under the influence
 of mutual attraction blending together and forming drops.
 Some parts of ^{the} ~~the~~ never have any rain vegetation when it
 exists at all, being supported entirely by dew. This is the
 case with Persia a rich and productive country.
 The Desert of Sahara portions of Arabia, and Egypt.
 We have all no doubt heard of manna which is propagated
 and foreshadow the coming weather. Scintillated from their horizons
 barometers and weather-glasses while the commonality
 are elated or dejected by signs and wonders in the heavens above
 and earth beneath. Some no doubt good others vain and
 illusory when the atmosphere becomes full of moisture.
 It seems to be a better conductor of sound than when
 not so filled. if we hear plainly the sough of the
 locomotive upon the R.R. north and south of us and the
 rattling of the car wheels or ~~the~~ ^{the} made by other
 causes at greater distances and more distinctly than usual
 we may surmise that there is so much moisture in the
 atmosphere that it will have soon ^{to} part with some of its
 excess whenever the color of flowers and other ^{that} to
 especially become stronger than usual this is an indication
 of more than ~~an~~ usual amount of water vapor in the
 atmosphere. Animals seem sometimes conscious of the state
 of atmosphere and manifest their concern ^{up} sometimes by
 playfulness at other as though they were frightened. The
 swallow will descend from his heights and skim
 along near the ground the flies that furnish his food
 tanning ~~down~~ come down on account of the humidity
 of the higher atmosphere. Man when in health feels nothing
 of the change but ~~rheumatic~~ ^{rheumatic} are often affected by the change
 and you will hear them prophesying a change of weather
 their names who so. Persons that have been so accustomed
 that birds to love shoe leather and wear their very small
 complaint that their soles are hurting, badly.

There are here two predictions of the Almanack as to when we are
 to expect rain or snow more or less than they are get-
 ting the various forecasts they are based upon the theory of
 circles the difference of opinion as to their value among those that
 have faith in them is enough to discredit the other theory.
 Some have a circle of every eight years that is that weather of
 the present year will correspond with that of eight years ago.
 Others have those circles occurring every 11th year others every twelve
 others say that there must be another long interval every fifty years
 so strong is the faith in these circles in Scotland that persons
 read for divination that they may save the harvest of the
 entire circle. But they in conclusion would forget the great
 influence of farmers making a study of the signs with which
 they are placed in such close correspondence instead of relying
 old wives fables and the trifles of the ignorant. Meteorology the
 science of the weather upon which the life depends so far as it
 is often the cause of famine, diseases which result of the position
 of the earth to cultivation. Chemistry which will improve the
 constitution of soils and plants and trees & vegetables. Botany which
 tells the structure of vegetables plants & trees giving us their names
 and uses. Physiology given us the basis of life and health. In
 no other occupation is there perhaps so much ignorance of the material
 world. Like the Doctor he will understand the quality of articles he
 makes, even the cloth he wears he can tell the value of things
 himself upon being asked. do you object and pretend want of time
 to do these things. do you spend more time in the morning if you only
 devoted one hour each day in the study of these things connected
 with your occupation you would soon be able to make one of these
 things and but a very little or year would be necessary to participate
 with the entire lot and then we would able to prevent mistakes
 our dangers or failures. improvement and progress should be the aim of all
 the M. House did not wish to be returned singular and would follow
 the example of other legislators when the principal filled his place
 they have considered this a return from duty.

Among A. Bowser A thought occurred to him during the winter
 having the winter disrupted in "Lancaster way" by a forecast that
 is certainly a gratifying evidence of progress and that such progress
 and such progress would be a certain indication of the

a plant with the ground is a necessity to freedom from it. And that the governing class are inducing these instruments of progress agriculture. These instruments governing class become an all dependent upon the farmers. They think out the process to make by all the advantages of science. I do not believe that take the large majority of men there is a very great difference of intellectual power the great difference is in the cultivation. The man that has not even his physical powers will be incapable of ~~anything~~ in labor with any one who has strengthened his physical powers by exercise. He is a ^{very} ~~low~~ analogy for the mental faculties. Would there was one point perfectly. According to your father was being a great advocate of frequent plowing of corn in dry weather. Experience may have taught him that it was a good plan, but science would have shown him the reason. The frequent stirring and pulverizing of the soil making it more porous and allowing it would retain heat more readily than if more compact and would in turn radiate faster than if hard in this way forming less power the atmosphere. Thus by simply stirring the ground you get these important elements in regulating growth heat, and moisture. The government has established within a few years a weather signal service that would seem as though it should be an estimate, where persons are situated to get their telegrams within a few hours after they are published. This weather signal has been stations at many different points on the N.E. to be reference being on advantage in the case of trains and some point on land from stations are supplied with these kinds of instruments for the showing the direction of the wind, something like a weather vane with an index just to the breech showing the direction. Also there is for measuring the force of the wind. This is done by having a surface presented to wind that can "pivot" on the principle of a spring balance with hand to indicate the force. The third is a barometer. It is a cup of mercury with a tube with a graduated scale attached to it open part extended for determining the density of the atmosphere. At the same time reports are telegraphed to Washington to get probabilities as he is called from from Washington wind south from Britain still south. Wind S.W. Littlebury. South and from water, mountain west. Cloudy evening fair & what is the weather at any point may with force and the height of the air in barometer. The chief of the service at Washington with a staff before him makes his report of what may be expected

in the probability of the weather when I received them being
comparatively perfect I got those reports if they had the probability
was rain in the valley of the Ohio I soon learned it was
frustrated of going out that day to take my combats along
and if they were fair weather the result would be a useful
appearance and I recollect of an instance in which it was a
disappointment a statement of the department for one year is that
80 per cent the predictions were incorrect and only 20 per cent a
few more there were not enough as they claimed to purchase of the
system but for want of appropriation sufficient to pay the extra
expenses needed.

the A. pilosa ~~all~~ I can say is that it is about as far as
as it goes to comprehend what has been said here ^{in my} ~~entire~~
and unimpaired by the lecture of the evening and if I could find
any further remarks it would only be to ^{add} ~~interpret~~ ~~the~~ ~~words~~ ~~which~~ ~~was~~
be said.

to J. G. Brown when he first heard the question discussed
was not so eager to know what course he should pursue
whether "indeed" to give instruction so that one would be able to
change the weather or no. It is true that he would not doubt that
the thought would occur to him as going to strengthen the weather
will be made any better of the storm. It is a great deal of regulation
of the community there would be in, great care must be
taken, it may be that we can perhaps destroy the elements
of heat or cold yet perhaps even these are impossible. The
strongly in increasing vegetable life and growth we heat and
vegetation without these in even will you doubt the heat and
the heat and your planning fertilizing and fertilizing will be
of no account if there or rather if there are wanting in proper
proportions. Thus we have to plant our seeds at the proper season
or when there is sufficient moisture and heat to produce germination
if you plant your seeds ^{in season} before the season it will not be possible
of to take the heat will perhaps be too great for the seedling and
even should prosper for some the planting and of heat in
the part of the season will be wanting to produce the crop
but when we plant at the proper season we may expect a
copious harvest. Nature has many ways of influencing
the soil with ingredients necessary for plant growth.

this process furnishing more sufficient of plant food is a peculiarity
 of those trees and shrubs, which frequently on dry times
 attempted to supply the water in the garden, by absorbing
 it and although the water was applied plentifully at times such
 dry days made it impregnated. But just before a rain came and it
 scarcely could be seen till its benefit was apparent in the
 repeated appearance of the vegetables although the quantity was
 not so ^{much} as before. By the sprinkling yet the benefit would appear
 to be very small. It is not just the water has been raised
 vegetation the rain in its formation and descent has carried other
 ingredients necessary for its growth. Hence it called the power
 of the atmosphere - that of rain is not some fresh being so strong in
 the kind of position that in early spring there is a some
 season when the weather is so dry in growing by this power I have
 been observing with three or four beams I stopped and again
 I have heard birds sing in such a way as to be called if I
 can only get all this snow placed under it will be no good
 a great deal of moisture - I do not know whether he would be
 a question to his youth or not. A response to show the moisture
 behind it to be from the same & that it is a great great
 breaking properties that it is in it would impact heavily to the
 the end. The species of the days want to be able and power to collect
 by power of such and other things. They called it the elasticity
 of the air. The theory of the theory relation in reference to falling
 in dry weather is correct the more ground there is the longer
 it is kept and such seasons the more rapidly will the water heat
 and the greater will be the amount of steam deposited upon
 it. We are beginning to learn that there is some difficulty from
 the fact the more or more could have been been predicted the best
 one are gathering and that we have been having the weather
 a little have been treating the prisoners and being towards the
 rays and passing and staying down with the weathering hardly
 and that is right since that we stop and lubricate that that's
 best way to repair damage and keep the machine well - it is that
 then will be no more breaking or grinding as to the it is difficultly
 to the the the and its character that the texture of the weather has been
 sustaining and highly instruction. He has struck the key that
 will unlock the wisdom of agriculture that will open the

Lecture Club of Vermillion Township given of Jan 28/12

A. Bucknell was present in chair. Minutes of previous lecture read and approved.

Subject for Lecture - Choosing an Occupation

Rev. J. A. Brown Lecture. When not called ~~to~~ I was not a little just in selecting a question for discussion before a farmers club though I have no doubt as to its appropriateness it is a question all have to meet or perhaps it has to be met and in some cases frequently and almost every one has to meet it for himself. Is there a mistake in the selection of an occupation, is a misfortune for life. This subject naturally divides its whole line phase one refers to choosing occupations for others under this head comes a responsibility for parents. The second phase is the right ~~which~~ each person has of selecting an occupation for himself. We are all born to be creatures of industry whatever we may think of some occupations taking life labor than others of high distinguished requirements are faithfully and diligently performed than with fond but a host of disfigurement true some occupations require more of mental effort than others, but then again there that do not require so much of physical power are obtained by the hardest application necessary for producing the best results. What then as to parents choosing and occupations for their sons & we have no intimation of young men choosing rightly at this time. There are frequently mistakes made by supposing that some trade or profession is full and hence will select further send some one of the various occupations which they deem not over supplied, as to the fullness of the ranks of any trade or profession we cannot regulate them. If you should select for your son one that appears now the least crowded, there is no certainty but since he is fitted for its studies that its ranks will be fuller for the demand than almost any other. When considering a trade or profession one governed by laws set either by ^{the state} or by providence. Whether the ranks are full here, very little to do with the selection of an occupation. The great majority of men are not inclined to go into the professions only the few that make choice of law, medicine or the ministry and there almost always a demand for these thoroughly qualified without any question as to the fullness or number in the profession.

William Russell as rendered in our translation train up
 a child in the way he should go and when he is old he will
 not depart from it. Should be construed so literally that we
 would make a grove channel and always expect the child
 to slide in. If train a contrary from any natural inclination
 when he is from under control will not like depart from
 the train. I once heard and cannot remember by it would
 be a better rendering when applied to these assumptions, a
 train up a child in the way he is inclined to go. Thus
 his habits of thought and action & you will often see both
 with some training of receipt and example as shown in habit of
 thought and natural bent as if their training had been at
 the expense and as well might you expect rain to wait
 by the culture of corn or corn in the same way that
 wheat is grown. The farmer that would plant his wheat
 in hills and cultivate as for corn would get poor comfort
 for his labor. We subject the culture to the subject.

The boy that goes to school with a year full and comes at
 leaving with a horn rather one or year then with a dilapidated
 jack knife and returns with one perfect in handle and shape
 if he has got them by legitimate trades. Nature has black him
 out for a trader and he will be more likely to become a prince
 among merchants than those who have no such natural bent.
 Such a boy is always whittling and with an object is striving
 to construct something of more importance. Nature has given him
 a start as a mechanic or inventor. The boy you may
 find taking the truckades upon the rivulets with stones and
 break through he has the pleasure of being a school of his
 manufacture put in motion reproach and even threatened for
 getting his raiment spoiled will be lost upon him he has had
 to him a luxury in advance that will more than compensate
 he will make a machinist. George Moller would let and
 the steam raising the teakettle lid and its jets of steam
 from the boiler no doubt those having charge of ordinary
 department would have hated him or dismissed but his
 reflections on us instilled for the steam engine.
 You have a son that is always making perpetual repairs
 with the ingenuity of the why and the reason of you should.

if you should attempt to conceal for distribution he would
 feel a conceal ask an arrest of judgment and ask a man that
 he is not and for a lawyer and you can make of
 him the meanest politician that will appear in seeing the
 wisdom of her with or the wisdom of the politician but by
 training him in his own way he may become amongst
 the most useful members of society. Angell's state related of
 Judge Mason circumstantial evidence was very strong against
 his client the judge made rather much of it in his
 defence but on showing him to the jury I know that
 my client is innocent the jury acquitted when asked how they
 came to render such a verdict replied Judge Mason said
 he thought his client was innocent and that the judge
 never said what charges would it work in society if all the
 lawyers never lied. To fall into grasp of many of this people
 you might as well fall amongst the thieves that captured the
 way from prison to prison. If you have a son always
 show him how to make a deal or drive a bargain. If his good clothes
 never can eat well and find of good things he is better for
 an abolitionist. Show him that if he has a better
 complexion than his eyes a dark handsome look that he should
 be made a minister. One point for fathers about. because
 some of you may have been successful in your occupation
 you will very likely conclude it is the best thing for your
 son as an occupation without giving a single thought to his
 future or whether his disposition is suited to all connected with
 the future. Much after the style of the boys of the Indian
 advising every young man to go west and grow up with
 the country. The second phase of the great changing and
 reformation for half a gentleman from the latter part of therefore
 informed me that the personal descendants of the original settlers
 of that section are fast giving place to place to a general population
 who often commences as renters or hired hands. This follows as a
 consequence of selecting for sons an occupation for which they have
 no love. The second phase of the question selecting an
 occupation for help. we should never allow ourselves to be so
 much misled as not to select the one in which we will
 do it. In the community the most white should take an occupation

[illegible]

3rd of March did not come with expectation of speaking, --
 The choice of an occupation is undoubtedly the most important
 decision or judgment a man has to make in life. And to go
 upon the principle which the character of the teacher's ability
 & propensity at our boards would seem to be the rule of
 money in their selection. Some of the incomes were something more
 others were small. The directors ^{thought} that every one had a place
 to fill. They thought these were strictly the persons to teach & select
 to they sent them out to teach. That every man is fit for an
 occupation is great mistake or that all are by natural disposition
 and inclination equally adapted for other occupations is the same
 kind of error. There are many inclinations that nature seems to go
 into propensities and desires. You will enter the law believing it
 to be the very influence and popularity others select their
 vocation by the money consideration believing an occupation
 to be more lucrative than any other. Then an interest by
 considerations of health to accept some occupation while health should
 be guarded with desperate care. The suggestions and suggestions
 in not forming and occupations conforming with their habits of
 thought. Will be more upon them that it will be of an advantage
 to health like the man that accepted to begin his law to live
 upon a small allowance of food just as he had been used to live
 I regard the occupation of teachers as the most important that
 has to do with this life. Considering the character of the
 rising generation having their minds of thought-forming principles
 that will govern their actions through life. What other occupation
 has such and opportunity for good. Money is not allowed
 as that as to the morality of the different occupations. There is
 a great difference in moral bearings of different occupations
 it is only necessary to know that enough in some of them
 before the amount of fraud and deception that may be practiced.
 A teacher is often applied to for advice in choosing a
 propension. I have always felt united as to such cases the
 most responsible that we can be called upon to give. If it
 should be wrong the individual will most probably be suffer
 for life. I have never like to advise the law as a career but
 a choice. I have perhaps have to great extent to have fulfilled
 the duty of the best judiciary. One of my responsibilities

is no hope to me that we should be read without giving
 from our collected opinions as to how to improve training as
 well before he reads us afterwards that he is not capable
 of sensibly filling the station. It would be better for them
 better for themselves and the profession to honestly inform them
 even when expected to be that they have not the ability requisite
 as successful Physicians.

1. The Lloyd Hall just as though I was not there after
 the hearing the remarks of the learned gentleman. The subject
 one of great importance. But it is to be feared that not
 few persons have that ripe judgment that will fit them for
 entering suitably the occupation for which the person is
 best adapted. Some have bias that would partially dequalify
 them. They are very apt regard their children fully as bright
 any other human children if not a little ahead. The course
 of study required to fit one for profession the cases, slight
 and qualifications connected with most professions when training
 required would have enough kept parents from selecting a
 profession for a son. While Agriculture has at various
 times they not appear to be that hereditary occupation but
 that attracts to most of the professions. The loss of
 any occupation would not doubt materially modify and
 compensate or labor incident to the occupation. Taking
 this for a standard by which to measure persons adapted
 to their occupation we would find a great number
 of persons in the way. The farmer requires some trade
 no much better than working in the hot sun in summer or
 standing the cold of winter while the tradesman seems to
 me have the farmer as much of all his days. Contentment
 with one occupation would seem to be the exception rather than
 the rule. There does seem to be something in natural
 disposition one will appear inclined to cultivate his
 mind others early manifest a disposition for pursuing
 the lecture this evening would have been trained in
 accord with these developments. But there is another
 class that very early in life show a disposition to
 stand and lie. The lecture forgot till whether there should
 be trained in the way they are inclined to go.

Sir J. Young after listening to the strongest
 discharges of the evening, it would seem like
 presumption that I should offer any remarks.
 The leading right is of first importance as well in
 choosing an occupation as in every thing else.
 This one principal selecting an occupation in harmony
 with the natural disposition will put us thousands in
 higher life labor care and responsibility. To illustrate
 the sportsman has hunted in vain for the most part
 of the day for game. he is discouraged but just as he
 discovers the object of his hunt and instantly his spirits
 and fatigue leave him or are forgotten in a trice
 in finishing what he had been looking for. So if man be
 chosen and occupation in harmony with his natural
 disposition he will have a source of gratification that
 will more than compensate for all annoyances. When we
 are about select an occupation whether mechanical or
 professional candid reason should be applied in its selection
 instead of excitement or because others are doing well, we
 may like counsel but should depend mostly upon our own
 judgment. It is a sad fact that there are a great many
 in occupations that are out of their true element. It does
 not mean, that because a man is good in one occupation
 he would be equally good in any other. Nor does it follow
 because a man makes a failure in one avocation that
 he is good for nothing. A great many young men having a
 rendering of the fortunes made in cities fancying they are
 just as shrewd as those who have made these fortunes
 will be off the city in spite of advice or remonstrance.
 The young stop to enquire of the thousands that have failed
 is the ones who are able to live in political necessity.
 There is another class of young men with a sort of literary
 talent about as green as your partridge that suppose
 if they can only get into a college they will by study
 fighting against walls or scribbling its seat that knowledge
 truthly increased effort to receive it by absorption as
 some homogeneous principle and that they will have attained
 the balance by the charmin rope of talent.

Choosing is an occupation of the greatest importance in the history of every individual it should be treated with such care that we may reasonably expect no regrets at the close of a career to advise any one would try to have done select a less occupation.

question for next session resources of the farm in fertilizing material. A. Nelson lecturer.

Farmer Club of Vermont. January session of Feb. 4/13.
 Dr. Macmillan said in his lecture on the soil and the soil and the soil.
 Subject for discussion. Resources of the Farm in fertilizing material.
 Addressed Nelson lecture. It can not be as the lecturer on reading the minutes of the last meeting, represents the lecturer on reading as being a little part in the selection of a subject, as I did not select her was I present when it was selected and as the lecturer but will take it for granted that the lecture is only just to get a subject started. I do not the aim and aim of the session of the club can have an opportunity of imparting upon it wisdom and instruction. The resources of the farm in fertilizing material the lecturer on the resources of the farm in the best kind of material I take it that the most important information or knowledge we have possible to get out of that of the resources of the farm in fertilizing material we would have the use for any of the common kinds that nature has supplied right on our farms all that is required to make them profitable and production and to sustain with wisdom and intelligent knowledge the soil and the soil.
 When our soil fails to produce satisfactory and remunerative crops it is important that we understand the resources we have to fall back upon for restoring the material supply and the resources of the farm. Nitrogen is one of the important and vital necessities of vegetable growth. It seems to occupy the same place in vegetable life as carbon to be of equal importance to carbon in animal life and plants as vegetables will turn to plants as vegetables as any more or better than man or animal would in an atmosphere destitute of carbon.

[illegible]

increased. This plowing should be done when the soil is dry one of two or three times to plow particularly sweet when it is not simply it is to make easier than then again the season has arrived that our crops should be planted or sowed but we have not weather we cannot the crop must go in even if the time to plant in winter. It would be good for better in the end to sow a crop than those sown over S.D. There is now, saying that our land by plowing, it was for one crop. Then would be produced by many years of cultivation with soil only stand when it is dry, my impression is that if we should plow our clay to the depth by three or four times in a season when it is dry with out cultivating any crop having it down to the soil in a better position condition that we would gain it producing the following season a crop equal to what it would have ~~been~~ if it had received a liberal coating of manure and fertilizer. But we have got into the habit of trying to make the best out of every thing, for the present. We then in very poorly planted and plowed up our farms to accomplish they and even our soil comes in with the share of the stream. But in the end we would do about same out much better if we took a little better care of ourselves, and secured a good deal more care in the cultivation of our land, in the crops to be sown especially while they do not cultivate the amount of manure we do elsewhere they do they try to do right and although they do not consider it as what usually get they expect when they attempt to raise it to get 30 to 40 bushels per acre but they will not labor and manure upon her more than we do upon hers. While our crops will hardly average more than 10 bushels per acre if I could so farm as to raise 30 bushels per acre in ten years we would be much better off than to get an average of 10 bushels one fourth way. It seems to be a mistake to take all crops into the barn whether of grain hay or corn fodder into the barn and whatever of surplus is not eaten by the stock but be tramped down with the droppings of the stock. But we have all been in the habit of hauling out the manure at the very season it has passed nearly all

the time showing by appearance that I was raising a large
 for perhaps half its weight by hauling it the ordinary
 time. We want our barnyard cleared up before the new crop
 is threshed & after our harvest in August we haul out our
 manure the most cloying part of the year it comes by compaction
 in short time fully one half its fertilizing qualities. I have
 in few cases hauled out bulk in the fall land that I intended
 for cover the following spring, and the entire decomposition of crops
 were hampered by it. The best corn crop I ever raised was
 manured in this of the preceding oat crop, on the land plot was
 good and the wheat crop that follows the oats was better than
 that manure in the ordinary way there is often a visible
 sand when manure is hauled out at that the right season in
 spring it lies in piles over winter in this way it will do
 little good the small stalks overcast by the piles so much
 too much so that crops of oats or wheat sown upon them will be
 too weak for several years while the manure will be lost
 out during the winter that will be of but little account when
 hauled out. I have part of a pile which for want of time was
 left in this way last fall it should be better out early
 when it is hauled to be the most benefit. The ~~main~~ ^{main} object
 is that we do not take care of the fertilizing product which
 our farms furnish. When on our barnyard manure we do not
 as a rule apply supposed to be of much advantage that is to
 say even the strong acres with a double shuck generally
 we will reject. You expected a hungry man to do a full day's
 work with a half the quantity ration for his meals, so to
 expect your soil to produce full crops, perhaps in its dense
 nature, excepting liberally should the soil if we are not
 even to cover more than half the acre or say closer
 my impression is that there are not that great opinion of
 clover that we should have as the best fertilizer for
 our farms particularly the first kind. I believe
 that the clover shade the roots penetrating deep in the soil
 that one crop of this clover left to rot upon the soil
 is much to be preferred to the ordinary ones, never manured
 manure, would that the fertility of our soil can be maintained
 by sowing very much crop in clover and taking care of it to
 have it

that the fertility it gives the soil will be sufficient for a crop of corn with wheat and that the soil will not deteriorate by this way of farming.

I H. Drachman, not being present at the last meeting had no knowledge of the question until the meeting read it through, have no preparation for making remarks. We are getting to use a considerable amount of plaster in our community and mostly with satisfactory results. While the action of sulphate of lime or plaster does not seem to be very well understood even by the best agricultural chemists yet that it is a benefit to growing crops experience has abundantly demonstrated. Phosphates of lime or bone dust has been largely used by English farmers and is being used to some extent in this country, but we can only expect to keep up the fertility of our soil by, clover and barnyard manure. The more grain our stock are fed the richer and the more fertilizing material will our barnyard manure be. I am a third time and believe that sheep have been over this field of ours for a thousand years and all the time they are increasing in fertility. As to frequent plowing seen in this valley I think there has been too much plowing done. The gardener in one of his papers says of a plot on his father's farm that it has been in cultivation for fifty years it being so far from the house and stables has never received any manure from this source, but has been kept up entirely by clover. Clover being a broad leaved deep rooted plant better than the poorest straw manure for the atmosphere and the subsoil than any other plant and as we have nothing of the plant kind let me keep up the fertility of the soil as it does everything that is required in its place.

I told you I never feel like thinking any duty and if I only have a minute am willing to contribute it. There have been some very good bits by the penman speakers. The more we know of the laws of nature in our farming operations the larger will be our success in the end. Our forest are a sample of nature's ways of doing the purpose of the trees put in the ground each according to season and all that is taken from the

land is thus returned and they have become very barren but
 rather steadily improve in fertility - if the lands were merely
 carried away from the land that produced them then to make
 the forest be refilled its fertility. So if we wish to keep up
 the productivity of our cultivated areas we must in some
 way replace what we take off. we are continuously hauling off
 to the East land stations by the wagon load the very best part
 of our farms and are not returning to the soil what we thus
 rob it of we are not following the laws of nature as should
 be in the forest. There are to their owners banks of deposit
 not far back in woods. But a place where they may be always
 making deposits of fertilizing material that will grow future
 divisions and make these deposits are perpetually kept up
 one should not expect the standards of that age the very best
 movement will be a further value. The laws that cause
 corn to rot and hay rotting it of fine form by the dried
 and then. is taking out his farms by the same process and
 weight. we have had a good many of these kinds of examples
 in the neighborhood. Among the first settlers there many of
 them was it said these farms were worn out and they hired
 as well as their neighbors and this too when their farms
 had not been worn down from their farms directly to their farms
 they sold out and went to again till off new land by the
 wagon load but the party purchasing passed a great
 course but the land in groups kept that little and the
 stock and consumed the grain they raised for the most part
 upon the farm. Now some of these same farms that
 thirty & thirty years ago were considered among the best
 regarded as the most productive and valuable of any in
 the neighborhood. If good farmers can take care of
 farms and then bring them up is then my good reason why
 the virgin soil should not run down and gone by your low
 life production. it takes the digestion of the bodies that
 everything should go into the barn and pass through the
 stables into the yard not even the cornstalks should just
 in the fields or still worse as I have seen in the woods and
 have said if you plow the waste and forest lands should
 go along with the straw they cornstalks into the barn yard

And from there they should in regular rotation be
~~carried upon the fields~~

Mr. I. having so not known that I can add much to what
 has already been said. The lecture had said a good deal about
 plowing land when dry and in winter in a good plowing when wet.
 There is another thing frequently practiced that is about as
 injurious to land as plowing wet. That is letting our stock
 run all over the farm when it is wet. Our fencing should
 be so good and so arranged that we could keep our stock where
 we wish. The droppings of stock upon the fields are of
 very little if any advantage in enriching the soil.

Mr. A. Nelson in speaking of Plaster and lime as fertilizers
 I did not wish to be understood as making them a part of the
 resources of the farm in fertilizing material for they are
 like all other commercial manures foreign to the question
 but merely aimed to ^{show} the better students the principle of the
 action of ammonia in the growth of crops. I was aware
 of fertilizing material and that of the richest kind has
 been entirely ignored this evening and that is the droppings
 of our hogs. Our herd of these are worth ~~them~~ or their
 loads of the best manured manure. There is great wastage
 in doing these I must plead guilty to as much negligence as
 any one guilty of. I have fed us high as fifty head to start
 receiving my benefit in this way. We should have paid
 attention to that this valuable fertilizer should not be
 a waste.

In Blackwell, it is evident that there is a great drain upon
 the fertility of our soils by different causes. There is a
 great drain by the washing away of the surface soil.
 Some of my farm and yours has been carried by the rains
 into the river and by them carried to lakes and rivers
 down the Mississippi to the Gulf of Mexico and by the Gulf
 stream on the Banks of Newfoundland. only to say I
 saw that the water from the melting snow are ~~draining~~
 from our yard the best part of its fertilizing material
 carrying it off in black liquid right before my eyes and
 all I could do was to say if you are young good by.
 One source of fertilizing material has not been named this evening.

then dropping this is equally good with the means of commerce
though with a different result.

J. G. Grubill has never heard mention of the club
till with so much interest in this training. The season
for hunting out hares is an important matter. I have
been following a good deal in the ordinary way of hunting
out after harvest. But am well convinced that it is nearly
half the benefit that it would be hunted out late in the
fall or early in the spring. It had and which in growing
a sort of young, young or rather ^{to} take time to form themselves
and with study and hunted it out twice a year and with
himself the best results. I kept sharp for the winter in a
lock after their moult had laid in the that for some
time hunted it out on the poorest pair of ground I had
ever about ten acres with it and from having the best
part of the farm it made it about the best and the
grain and crops showed its effects for ten or twelve years.

Question for next Spring Gardening and collecting seeds & specimens.

Warren Club of Vermillion Friendship Series
April 11th 1878 Minutes of Previous Session read and approved
Subject for discussion Gardening & Cultivation of Root
& Leafy Vegetables. Do not know that it has been
the subject of Gardening and Root Culture interesting to
the Club but whether I care or cannot will not change
its economy or profitability. I believe that there is no
kind of gardening that will pay better than a good garden
and the cultivation of even for family use and that per-
sons can be raised from one acre cultivated in herbs
to keep and fatten stock than anything the farmer can
raise. Even if they should only raise a fourth of an acre
to plant of the Root or yellow bristly Hartsels or sugar
beets. Carrots yield well and are the best feed for some
kind of stock but they take too much land. I would
rather cultivate four acres of such the one half acre of
of carrots. I do not keep for feeding stock I should

prefer the yellow globe mangel warts as they will do
 better on a poor soil than the red mangel or sugar
 made off you have a very rich soil the white will grow
 larger and make more bushes to an acre but even with
 this kind of soil I think the sugar that would be
 preferable on account of containing so much more
 sugar. In gardening there are many things that pay well
 on the account of labor they require hardly any. Cabbage of
 most kinds all pay well one would have to do the cultivation
 and I think I have heard much for the last time to make
 them pay well with hedges. But with business if the
 labor is taken care of when the crop comes off it will last
 for five or six years and then it is much time lost by
 raising it that the first crop in this spring of sugar would
 pay the expense. ~~Some~~ Cabbage is perhaps the most profitable
 crop that can be raised. I believe that about what you
 see in our country just being for two dollars in some gardens
 one from our estimate one a half more. The ~~best~~ would
 be more than they are but not about the first of July
 I was following cattle would find that ~~but~~ ^{and} take much
 up land and labor to do it than with corn. The first fall
 it yielded a big return with work and some more but
~~hardly~~ to go better but if quite so good
 in Marshall some act a yardman and don't act as if putting
 to speak. If I was a gardener or intended to go into ^{garden} I should want
 to be near some city should feel like going into in the neighborhood
 of Longsville strong we are very attached for the place
 if I had determined to go into gardening I should certainly
 expect to pull up stakes and locate near some city. where
 they are thousands that never eat a vegetable of any
 kind but what they buy. it can personally be verified
 with two men that have made fortunes in gardening but
 they were located near cities. one of them commenced
 just as poor as anybody was commenced and to day is
 worth \$20000. Small profits belong to gardening and
 there always pay big when a person is so situated to
 deal ^{the} have been a market at a reasonable distance.

I did hope ~~that~~ unfortunate in not hearing the lecture of the evening. I have less practical experience and more interest with gardening, than almost any other branch of agriculture. Whether it is very or even reasonably profitable I have no experience that would warrant me in forming an opinion. But one thing would seem to me very fit in if you were to venture for profit you could have to be located in some large city to find a market for what you ~~should~~ raise. If you have a no within or far or not with of New York then you could reasonably expect to make gardening a paying business. If you also to go into gardening here what would you do with what you raised you could not ship it to any city and even if you could find a sale for it in the market as far from there for a profitable market as there are always plenty of parties here to take place and to go into the business as fast as there is a demand being near to the market they will always know what is wanted and would there be an advantage over any other to ~~be~~ market as an owner. So far as raising seeds for planting is to be taken into account I have to doubt but we have all been making a mistake and not talking more of them or change of seed for stock is more than the best is keeping and I feel that in proportion to part of the food for stock being made of some kind they eat as a medicine keeping them healthy and in a healthy state it is a cutting to the profit, and it is all right.

Mr. McQuillen this is the first evening I have attended a meeting of the club this winter and have come to estimate myself as a sort of backslider in leaving the cultivation of seeds for pasture short of the advocated by some of the members last winter. I have tempted to go into that cultivation and have tried some of these some attempts to make them successful again this evening, and would pronounce them as ~~being~~ they take too much work and cannot be raised in the past things with any care to be cultivated ~~and~~ by.

them clean of grass, weeds and such and then you do much with
 a hoe, but ~~not~~ ^{and} you break down them clods. ^{as}
 Your fingers I have no fancy for the prizing business in turning
 any kind of crop then when you come to put them out
 bury them in the soil and then go to the heap in the
 winter when the ground is frozen and perhaps covered up
 or left under a little snow dig a hole in your plot and
 put in the things and again cut them up and put your
ⁱⁿ ^{the} ^{soil} ^{again} you know better than they know too and
 you will see nothing would much rather raise the same amount
 of corn and you can go to the end of much easier and feel
 it as you, no gardening is to be taken into account of as
 anything on this farm as I should have large gardens
 I want to see where they should be a considerable longer
 than wide so that they can be fertilized with the
 horse, if you dig the soil as evenly down as you will
 you can that in corn & potatoes with it to be often
 down even to put down the. A Mass. is just plain,
 every five years to try to catch all them. As the husband
 of potatoes the labor was neglected at one of the meetings
 the photo and I believe by the action of the farming to
 reject in planting the seed in point and this I pronounce
 as farming. The whole being now and now I determined
 to experiment I planted alternate rows of corn, beans and
 only go in to see this way placing stakes at the end
 to be in a properly labeled as to what be the potatoes
 the seed went down four or five days earlier than the
 row given by the nature of the potatoes with strong healthy
 stalks and they kept ahead throughout the season the most
 than usually for early and I took measure of quantity as I
 should have done but when they were picked up the day
 about the difference was a day or more as the seed and
 in the number and size of the potatoes I think the early, double
 D. seed will show the difference compared in the experiment with
 the potatoes and I think I tried the same thing with the
 at the Worcester and French. When I could see no difference
 in the growth or in the quantity when gathered they were
 with equal

Mr Robt Glen As far as I am concerned in an opinion
believe that one acre of vegetables is not so ^{profitable} as
supporting a family or feeding ^{stock} there fore acre in any kind
of grain. ~~However~~ feeding ^{stock} with corn I have not
that while they increase the flow of milk it is very costly
& trials of the vegetable feed this is particularly true of
Cabbages and Turnips as to feeding but have had no
experience. Have been engaged in raising potatoes to
plant and return them the most profitable crop we can
cultivate. doubling generally in value any grain crop we
cultivate. I generally commence filling my ground in the
fall by giving a light coat of stable manure and
plowing it under then in the spring give it another
similar coating of manure and plow again and when
I come to plant have "composition" of lime plaster and
horse manure which I drop on the hills before the seed
is dropped by this method I have raised ~~at~~ ^{about} 400 bushels of
four hundred bushels per acre. but I have found
that when these very large crops are raised the potatoes
are never so good as with a smaller to have the best
quality of potato do not think the crop should exceed
two hundred bushels per acre. they are valuable for
feeding milk cows increasing the flow of milk improving
so bad taste but they should be looked to derive the
most benefit from their use.

Mr H & W do not know that I own anything to add that
will interest the club having ^{any} ~~any~~ ^{any} experience in cultivating
vegetables. would say that I have been instructed by the
experience of members this evening and think this ^{time} very
to advance in agricultural knowledge. Experience and that
we will certainly know for ourselves that what is efficient
and profitable. The Potato I regard as being among vegetables
and perhaps my report for it is enhanced on account of
fourscore for I can eat it three times a day and still it
would be almost a luxury to me. The trouble and argument
of feeding roots in ^{feeding} ^{feeding} that a member has experienced
~~might~~ could be obviated it would have to be by knowing
the value

of brush which put into a bonfire with brush out when it
 comes to use from top to bottom. It is better to wait
 than to be the best numbers by our appearance, & we want
 the most perfect growth. Brown corn being better in quantity
 more and grain are very likely to get the best and the first
 washing is mostly in pretty heavy job. ~~plowing~~ and to a paper
 stand and get it clear of grass and weeds. You can only ~~do it~~
~~do it~~ with a hoe & the time for plowing is from the 1st
 of May to middle of June we have plowed as late as middle
 of June and had a good crop would not plant before the 20th
 25th May. If you should plant earlier there is danger that
 there will not be sufficient heat in the soil to make it
 germinate. In harvesting the crop this should be done before
 it gets frost or a frost will make the corn brittle in
 preparing for cutting. & Afternoon the third and fourth rows
 and going backwards break over them rows about them put
 from the ground laying them together making ~~about~~ ^{about} one
 call a bundle, then take hold by the point of the snath or
 top of the corn and cut off above the lower part where is
 no much of the stem, ^{instead} we should left with the brush. The best
 plan would be to cut in the forenoon and take in afternoon
 as the dew will damage it after it is cut and under the
 circumstances should it get a rain after cut if can be
 avoided as it blisters and rots it. If you have a large crop
 you will have to be careful to cure and the drying rack
 always be under roof can must be taken out to get it
 too thick or it will heat and damage where there is but
 small quantity the best way to cure it is by scattering out over
 a hay rack. (In answer to question) There are two kinds of Corn
 from but I thought that recommend any one to cultivate the
 one which in this latitude as it is so late in sowing
 we cultivated some of it one season a good deal of it did not
 head out. If it could be raised the brush is of a better
 quality than the ordinary kind (In answer to question) We
 used as a fertilizer one year. A mixture of barbed and plaster
 mixed at the rate of one barrel barbed to two of plaster
 it made a decided improvement in the crop in quantity and
 quality of brush. (In answer to question) We do not think there

profitable to raise than ordinary corn unless a man is a
 Brown Maker and works it. It is like other farm products
 variable in price at present it is high but lately 75c
 dollars per ton which is very low, has known it as high
 as 100, Hundred dollars a ton. Manufacturing brooms is
 considered a very unhealthy occupation by most persons
 that have able to stand it. The farmer of the brimstone need
 in bleaching is the cause of its unhealthiness (in answer to
 question). The use of brimstone is to advantage in the service
 of the broom but the custom is to bleach the corn and then
 to be dyed in some way before it can be marketed and
 it is done by staining it with brimstone (in order to give
 the corn will produce about a ton of clean brush this
 would be about an average crop. The best crop we ever
 raised was on three acres of bottom land it made
 One Hundred and twenty seven brooms and got forty two
 bushels of seed. But he had a full bush of seed & he and
 his father had planted here got it ground and fed cattle with it
 and they improved by it we consider it fully good to eat for
 feeding purposes (in answer to question) would rather plant the
 bushels of grain than before the first of May.

Q. Did you Brown corn as a crop with which I have
 never had any experience have never raised a single stalk
 but have always held the opinion that it is only profitable
 to cultivate by those that are Brown Makers. A farmer not
 understand the manufacturing of brooms can double its value
 by making it into brooms and this he can do in some
 region could do nothing else to advantage on his farm
 in winter weather and the long winter evenings the labor
 of the evening still more confirmed me in this opinion
 as to the only persons that would profitably engage in its
 cultivation. The lecturer has suggested that manufacturing
 brooms is a very unhealthy business on account of
 1. brimstone. They use in manufacturing the brimstone
 asked a pertinent and proper question whether it
 added to the service of the broom the staining with
 brimstone. The lecturer answered promptly that it did
 not add to the service or durability, that it customary to

In preparing the ground it should be well plowed and turned
should be turned over once and nearly that in turning
the soil may not be turned up. Then there should be made
by harrowing or cultivating on both a new mellow and bed
this is a point that I would insist upon first is the first
and most important step in securing a crop it makes the
after cultivation very much easier. If you plant you cover
upon ground poorly prepared not properly firmed before planting
covered with hard clods or after cultivation however good will
be of no use in getting a good crop as if the soil is got in
loose condition before planting. When the ground is thus properly
prepared the next thing in order is the season of planting
from the North or South of the latitude of the place to be
the proper time in our latitude. The corn crop has a good
season, covering the ground are perhaps the best and good season
the best season only lasts till about the middle of June
or planting early if this past should cut off the first planting
there would still be time to replant and secure a crop
In past season we had a field cleared up by the last warm
replanted on the sixteenth of June and had a good crop
There is no remedy for the just warm relief it is fast planting
in May but then winter season. Then comes the selection of
seed there are a great many kinds the common yellow and white
brown the Hooking white and yellow that yellow and white
white first round Canada flint, King Philip's corn
Turkey, Red and many other kinds. But from my
experience I prefer the common white it yields more
bushels to the acre and matures earlier than our common
yellow. Narrowing out is another thing that should be
done just right the furrows should be straight on an line
not zig zag like the worn of a road from. Corn should
be straight, and with even spaces in each easier cultivated
then when done without system or order. The best distance
between furrows seems to be Howard's half feet by three and half
feet. with three stalks to the hill I think we will find
it profitable not to spend this money. We see in the
lowest corn when we read of the children of Israel going
down to Egypt for corn No doubt money is more is under

The impression that ^{has} resulted after the kind of ground which we know by that name the word Corn is general one meaning the entire kind of cereals as we use it for a long period. Maize is the correct word It is Indian potatoes a native of the American Continent and when the first white men discovered and explored it was found cultivated by the Indian Nations from Honduras to Chili. Indeed the discovery of America the civilized nations of the globe have nothing of Indian Maize the potato and I have almost people the potato is the potato the Turkey, white wheat &c &c are natives of Africa Europe National and independent products we are largely indebted to the cultivation of the Indian Maize. It has more of the following principal than any other cereal and for growing short nothing we have as to compare in keeping, strength and growth about wheat. It stands well in soil from heavy cake or deep it commences our best reports. After eating a dish of soup and milk with a conspicuous eating comes over our feet just as if we should wear ~~and~~ anything "short" than the fruit made with maple molasses why it makes the sugar more deep, or for and will come down to you and to the effect of a taste of cornmeal ^{feeding} with sugar not desirable. It is the place I is made into corn for domestic called corn which it is a beautiful transforming influence makes the corn into a rich "corn" from the Maize all that comes and though we may make it in the fall we will recognize that it is refining on a kind of Maize corn.

Do you know there have been about for a few seasons. While the big Maize have pretty nearly lost the trace of the corn. The Indian stock of covering, the seed of Maize corn quite shallow the necessity for this is an account of the smallness of the seed the smaller the seed the thicker it should be over some of the very small kinds of our garden vegetables should only have a more sprinkling of soil or covering the larger the seed the deeper it should be covered. The quantity of the Maize corn comes to the point on the cultivation of corn that I am going to try for "large crop" I should plant that in the fall and in the spring the big corn, it is,

Then in furrowing out the first time should furrow ^{deep} ~~just~~
the second or crop furrowing would ~~be~~ shallow. The
crop furrowing being shallow a mellow loose soil is left
by the plow in the bottom of the first furrow such places
that corn may get a start in rooting without any obstruction
from clods or put out finely pulverized. ^{about} Now as to the
weather will permit us to get the advantage of the spring
rain and get the corn large enough to make the ground ready
in the summer. in covering corn would cover three or four
inches in depth as soon as it comes up would go over it
with a two horse harrow. Then follow with a roller. The
trap it thoroughly worked should be the object of man
should stay in his cornfield whenever the soil is dry enough
to work. (in answer to question) Believe that plow is a good
^{thing} and that heavy kind for it is a good implement. Would
plow deep and close to the corn with double shoul plow
Then to be surprised there is something in the color of
the plow and don't know how it is. but sometimes where
you see a black rusty plow laying in the furrow toward the
corn is never so good as where the plow is kept bright
and shining a sort of silver color. This brightness was always
to be kept up by scouring in the soil most of them of
the scouring is done in the soil with the better. you
might keep your plow bright with a sand stone brickbat
or every wheel but it would not answer instead of
the polishing in the soil. It gets a sort of magnetism or
electricity by being ^{and} so used in the soil that is a great
advantage to the corn crop. don't let your plow get rusty
when you come to take care of your corn in the fall
the better way is to cut up by the root the substance in the
stock will fall out and pasture very fast ~~are~~ ^{are} corrigent care
Have never thought that turning was the right system the
winds perform the same functions to plants that the winds do
to the animal system so well might you expect "man to pasture
and grow without lungs as you can to pasture after being"
topped and stripped of it blades. I once got up a small patch
here in Kentucky now and it ~~gave~~ ^{gave} pasture and was good
ground corn

J. B. Smith says he would agree in the main with the directions
as to the cultivation of our corn crop, but a little more like
some exceptions to one and the other he suggests as to the
distances for planting 4 ft & 4 ft but this will do for a first
but for better land the distance should be put up there
4 ft & 4 ft As to the sowing in the fall and again
in the spring should not do it. If you sown in spring the
seed would be but partially rotted and would ^{be} a great amount
of labor and trouble in determining the grain that is not short
up if I sowed in the fall I should see a considerable quantity
harvested until I had secured a thoroughly rotten seed but
~~but I believe~~ my experience leads me to believe that early
in the spring as soon as the ground is dry enough is the
best time to plant over ground for corn. There is to
fallowing out I should favor ~~that~~ ^{that} for
both ways ~~that~~ sowing corn that he would cover it with
would fail I think in coming up at least much of it
Two inches is certainly sufficient soil on top of the corn
to bring it come up properly. I have always selected my
seed in the fall taking the best ears from the largest and best
stalks and always from stalks with but one ear. Others
may talk of getting them seed from stalks with two ears
I believe it the worst way to do so. I have been
able to find ~~two~~ ears upon a stalk that were as well
developed as where there is but one. The ear is shorter
and the length of the grain upon the ear. As to the sowing
Harvest for corn after it comes up would hardly give happiness
for it whether you do you should do right and at the right
time. Please keep seed but it get hard around the hill. As soon
as you can there always been in the habit of repeating the hole
and tips of the ears in shelling seed corn has done it more
through following custom than for any reason from experience
but have said that it is the very thing that we should not
do the winter claiming that all the grains are sowing, ~~but~~
~~the~~ ~~the~~ grain are sowing to properly furnish the crop
claiming that the ~~the~~ triple from the best from different parts
of the ear will come out at the right time to furnish the ear

kind is to have shelter for stock at this season of the year
 stock sitting out over the fields at this season not only injure the
 ground by trampling it & did but injure themselves by eating
 frozen grass &c just enough to increase their year's eating by feed

J. B. Smith Esq. agrees in the main
 with both opinions but more particularly with Mr. Polson's. He
 favored better sit by the stove at this inclement season of
 the year than making rails, building fences, making stone &c
 better economy to not. He has this winter with useful
 knowledge like breaking down these contradictions, improving their
 health & improving themselves for the duties of the coming year
 and summer. When action later is all important and one
 day's labor then is of more real benefit to the farmer than eight
 a dozen now. He thinks it is not all of life to day & night work
 sun shine and shade. but farmers should have an eye to winter
 day, pleasure and not shorten their lives by doing themselves
 through just & law. raising corn but taking care of stock
 manure kept on our farms and cutting the necessary
 amount of wood is enough for the farmer to do. He
 performs hard labor through the summer. He thinks it makes
 no difference what time of year labor is cut for raising
 &c. both regard to its utility which statement is not
 officious. Mr. M. T. Southwell called and a spirited discussion
 followed — Mr. James Dix thinks it a good idea
 to build fences, haul rails, chop wood &c in winter as
 it requires but little time to carry loads, feed stock &c
 a smart active man. Other members of the Club thought
 it would do for an old Bachelor to talk that way but the
 man who has the care of a family it will never do

Mr. J. H. Blyth believes in Polson's idea of
 doing as much work in winter as possible but to take care
 of stock is about as much as farmers can do. He thinks it
 generally to his interest to have good stock in fall
 He thinks a good power to cut stock &c. down in winter &c.
 summer and a woman, feeding in winter &c. in
 doing work on a farm. Some necessary to carry stock, he
 thinks the horse should be often in carrying & feeding &c
 The time we are in to in a day of the year &c.

& Hogs in corn. him with the time necessarily occupied in
 a pine wood requires is at farmers should do at this time of year
 before they go farmers to get every thing ready for the coming season
 in the fall and then he can take care of his stock. Now
 his mind with useful knowledge at this time from

Dr James Brown says, necessary part
 bring to the farmer their various cares spring, shearing the great
 work which should be done following, & planning the various lines
 of stock, remodeling old fences & building new ones. Summer
 business, brings the all important & laboring time will, then
 Oct. and all the various kinds of grain together with the early
 & hay & making the fall brings the feeding. The cutting and
 feeding of corn & winter brings the care of stock — Stock
 well husbanded is half wintered. Stock should be well taken
 care of to store requires more abundant food, if you neglect
 your stock to over come in winter it will take half the
 summer to get them where they started in fall. Think now is
 the time to make rails & fences. One should be taken to keep up
 in general, except in order work after your grain is cut, get every
 thing ready that good tools can do as much more work with
 good tools than you can with poor. good advice to show your mind
 with useful knowledge. and good Agricultural works. Farmers
 need as much knowledge as any class of men

Halverson Club. November 1st Session of March 24th

I got up first in this Assembly of last evening soon and appeared, Subject of Lecture "Growing the horse I don't by Statistics". I don't think I am pleased to see so many present this evening, but am sorry that some of the members are absent that I must assured to have present, it was on account of the sentiment they entertained and promulgated on the last evening, that induced me to select this as the subject of this evening's lecture. I have always made it a rule to be punctilious in fulfilling my engagements, if others have they may be, as I should not have been present with the club this evening, the severe cold might and my suffering from a severe pain in the head would have been a landable excuse for disappointing you with a lecture. I am therefore not in a very good condition for talking to you on this occasion, the subject under consideration is one in which we are all, perhaps better in theory than in practice, the horse being one of our noblest and most valuable animals, it would seem that wisdom and common sense would lead us to give him that care and attention which he so demands, if any of you doubts the value of sticking to the former let a disease similar to the one we had a few months ago, come among them in the busy season of plowing and he will soon become convinced of their usefulness, we hardly ever fully realize the value of any thing until we are deprived of it. We can generally judge pretty correctly the owner in reference to cleanliness by his horse, if the horse is clean and sleek and in a thriving condition, we would naturally expect to find the owner in a corresponding condition. Cleanliness is just as necessary for the comfort and health of the horse, as it is for man, duty and interest ought to prompt us to the proper care of the horse, the farmer who neglects

And measure his team through the winter
 with them in a condition in the spring so that
 they will surely be able to plow some 1000 ft. day
 without the man that gives them proper treatment
 will be enabled to perform double the amount
 of labor with them, It has been said that to put upon
 more care than the bottom of the horse, it is of the
 utmost importance that he should when it is clean
 up he is allowed to stand on the wet ground his
 feet will soon become diseased and render the horse
 of little or no service, another great benefit from
 keeping a horse clean, is apparent from the fact
 of you take a horse out with the experiment and
 other folk accumulation on the skin he is more apt
 to chafe and galls than when properly cleaned and
 kept clean, but I have probably said enough on
 the duty and importance of keeping the horse clean
 I will now say a few words in reference to the
 manner of doing it, It will be necessary to
 supply yourself with the proper implements, such as
 curry comb, Card, brush and sponge &c. It may not
 be necessary to use all these at the time, at any
 time the brush or a sweep of straw will do all that
 is necessary to use, at another the curry comb
 the important thing is to get the dirt off and the
 skin clean the implement to accomplish this is not
 so important, or at least they may be selected suited
 to the amount of dirt to be removed, another very
 important matter is to keep your horse well conditioned
 with nice clean straw or chaff, this will require
 a great deal of labor with the comb, but still
 there will a great deal of dirt accumulate, and
 like Dr. Johnson's dog's mouth beard that he is com-
 bed to be kept constantly polished on the top, so we
 must make a frequent application of the comb and
 brush to insure cleanliness and a polished appearance
 of the horse, treat him kindly but firm and
 he will soon become attached to you so that you
 can control him at pleasure, a horse that

Cared for well require less food & keep him
 up in condition and spirit, than one that is neglected
 & poorly groomed, the appearance of the horse is a
 sure index to the care and taste of the owner.
 As regard to the kind of a floor to keep a horse steady
 on, an answer to that a ground floor preferable
 some horses may do as well on a plank floor as any
 other, but the majority are disposed to stifle or lame
 themselves on the plank by standing on the hard floor
 My first experience of 14 years with ground floor
 never had any trouble with the floor or with lame
 or diseased legs or feet on the horses, for the
 last six years have had trouble in keeping the floor
 level and had to resort to plank but found my horses
 are more inclined to get lame or diseased on the plank
 on this kind of floor, some think it does not
 pay to spend much time in carrying the horse
 but in our attention to the horse as well as every
 thing else there is no excellence without great
 labor, As I described I shall make but a very
 small space. I can see but very little in the
 question. am not in favor of loading a team
 to shoot ground & general, & dirty horses should
 be cleaned, remove the dirt at least once a day
 I can find you men that spend one fourth the time
 carrying out the hair in their mien, until, better
 not to let the hair grow and you will be saved
 the time and trouble in carrying the dirt off your
 horses, and the best way to keep your farms
 clean of dirt is to stock them with foot-cures.
 W. S. Parker This subject is of some importance
 to the farmer, but I have my doubts, ^{that} so much
 carrying especially with a new carry could bring
 any benefit to the horse, and what I have read
 on the subject together with my own experience
 fully convinces me that too much scratching
 and rubbing the skin is injurious to the horse
 my theory (although it is better than my practice)
 would be to keep the horse clean, but in

closing it, a good brush and sweep of often
 would answer every purpose and would be less
 likely to injure the skin especially about
 the legs and joints, than the crazy wind, I agree
 with you in reference to the kind of floor
 I think more injury is done to horses by standing
 on hard plank floors, than from any other cause
 and still I proceed different from what I practice
 in this matter, I have been in the habit of using
 a plank floor but I believe a good ground floor
 would be much more preferable and less injurious
 to the horse, I have always noticed that those far-
 mers that are careful in keeping their horses clean are
 also regular in their habits of feeding covering and
 bedding, and this has probably as much to do with
 the well being of the horse as covering, that
 that horses not used much, or well bedded regu-
 larly watered and fed is all that is necessary
 horses that are at hard exercise require a pipe
 cleaning in the evening to ensure a good night
 rest. Mr. A. Roy has not attended this school
 much since this evening to learn so far as to
 speak, but must say here failed to get much
 information in reference to the mode of covering
 when I kept horses in town I attended them myself
 took the comb in one hand and brush in the other
 ran the comb back and forth gently but firmly
 back and against the hair until the dirt and dead
 stuff is loosed then follow with the brush, and finish
 up with the tail of a dead horse, Mr. A. Roy
 when I first heard the subject did not think there
 was much in it, but since hearing the discussion
 have got head of waked up, think the objection
 advanced against plank floors reasoning, as the objects
 of hardness can easily be obviated by using plenty
 of bedding which can be left for the horse to stand
 on making it as soft as the feet as a ground
 floor, the great objection to ground floor

as horses will far out in holes you cannot keep
 it in any shape unless you far out them and
 then it is harder than plow. Horses should stand a
 little higher in front than back, in consequence
 of the greater weight in front ~~of the body~~, I am drawn
 in favor of blood flows, by seeing your horses
 well bodied, regularly fed & exercised you need
 have no fears of not thriving and doing well
 in a smaller so far as carrying stock it is
 necessary, but too much of it with a new owner
 I deem injurious, all those that have had experi-
 ence in the matter seem to condemn it, & good
 brush and cloth will do the work as effectively, and
 with less injury to the skin, I am in favor of blood
 flows, have had some experience with ground
 flows but they are hard to keep in shape for
 a horse to lie or even stand in with comfort
 This time of year when horses are shedding, I
 think there is generally too much carrying done
 for the good of the horse, As ready the question
 has been so well handled there appears to be little
 left for me to add, I have always been in the habit
 when I attended horses myself to endeavor to keep the
 skin clean and smooth as possible, think it adds much
 to their comfort and health, and always found
 it speed since on sales in this state than ~~the~~ ^{the}
 of labor in carrying, from 1860 to '70 owned from 60
 to 70 head never purchased a horse unless I received
 him, but by taking good care of him found that
 there were others that wanted him at an advanced
 price sufficient to pay for my trouble in care
 and carrying, I believe, don't think I have
 another subject under consideration the attention, espec-
 ally in the practical part, that the importance of the
 subject demands, the horse being the noblest
 as well as the most useful of our domestic
 animals, it would seem that duty and economy
 ought to prompt us to ^{give} him that attention and care
 that his value and usefulness to us demands

he adds greatly to our pleasure and our profit
by his labor in the field and in the rack. He adds
nothing to our health, as well as to our pleasure and
general welfare; though suitable and properly prepared
food is the prime requisite for the horse, regular grooming
holds the second place in the management of him.
A man who counts the customary ablutions at stated
times - who goes for days or weeks with uncombed hair,
may exist - but does not live in the proper sense
of the word, grooming is also essential to looks,
health, and elasticity of action. The every comb and
card should be brought into daily requisition, nor
should the clipping shears be omitted. The man who
neglects the regular grooming of his horse is an
enemy both to the horse and himself. In some houses
he withholds labor which is his due, and to himself
because he deprecates the value of his own property.
Good horses should have their legs well rubbed
and in case of fatigue, a good cleaning and rubbing
is worth nearly as much to a horse as his feed.
A horse highly fed, and with but little exercise
throws off through the pores of the skin much waste
or dead matter, and consequently requires more
regular grooming than one that is little used. Good
stabling is also essential to the welfare of the horse
horses catch cold as much as men do, and as there
has been some difficulty, in the construction of
fanning mills, to gain a strong enough current of wind,
I would advise the builders of them to study the
construction of some stables I have seen in the
neighborhood. To keep our horses then in a good
thriving condition, they must be properly sheltered
well and regularly, but not too highly fed, properly
exercised, well cured, and managed, they may for
the promotion of their health comfort and
strength

Subject for next lecture culture of
sheep J. O. Miller Lecturer

Famous labors of Vermillion T. P. Mason, M.D.

John Crabill Esq. was in the Chair. Minutes of last meeting read and approved. Subject of election:

The wheat plant and its culture: Wm O Porter Esq., M.D. Porter: Some believe that wheat was created as it now is, and was from the beginning the every day food of man in the form of bread, like the Bible pronounced against Adam "in the sweat of thy brow shalt thou eat bread"; From this we see how ancient were the productions and Commerce in wheat, and the history of all nations shows it to have been the chief product from which bread was made. I has therefore assumed an importance above any other cereal. When America was discovered it was not found on this Continent. It was however, soon brought here, and a story of boys finding a few grains in some place sent from Spain, found and planted them, and from these, it is believed, the wheat of Mexico and the northern Pacific was derived. In the Commerce of the world it is the product, regulating, as Webster said the exchanges of Europe and America. It is not limited in its growth to a particular kind of soil, red and yellow clays, sandy loams, or light carbonaceous, all well adapted, much depending, however, on how well they are protected by snow during the winter months, where the snow is not a adequate protection Spring wheat is substituted.

Artificial soils—deep plowing—drainage and manures. Local tenacious clay soils, which are not made dry by one or both of the first two of these, is unfit for the growth of wheat; Wheat demands dry soil, not only as to sprouting out, but as to superior quality of wheat, as in California in 1856, when no rain fell from the opening of Spring until the wheat was harvested, and there was a marked superiority in the quality of the wheat crop for that year. Ameliorating of the soil by manuring is of three kinds, Barley and manures, green manures and some kinds of mineral manures. There is no crop that shows so quickly and to so great an extent the

benefits of Barley and manure, as wheat. It gives
 a strong fall growth to the roots of the plant, making
 it the better to endure the freezing in winter, and from
 its pulverizing agency, making the ground friable, a
 quality so essential to the growth of the wheat plant,
 as for instance, see old garden spots and sites of
 old buildings, where the wheat in its full growth and
 vigor may be seen at this season of the year, while
 other ^{parts} of the field are badly winter killed. The vigorous
 growth of fall is only renewed in spring and hurries
 through the ripening stage, and from fly and rust,
 Green manure - plowing under clover and other
 green crops, besides returning to the soil so much veg-
 etable matter, a green clover crop thoroughly pulverizes
 the soil. The fallow system should be universal here as
 it is in Europe. There are three kinds of fallow, naked,
 green and the crop fallow. The object of the naked fallow
 is, by repeated plowings, to bring and prepare the soil
 for the wheat crop. But these plowings should never be
 when the ground is wet. Green fallow is the turning under
 any green crop as a manure for the succeeding wheat
 crop. The proper time for turning under is when the
 united purpose of manuring and pulverizing can be
 best accomplished, and this is when the ground has
 rained so high moisture to break up loose, and the green
 crop time to rot before sowing time - which time for turn-
 ing under is perhaps in the month of July. By deep
 and repeated plowings, the following benefits are derived,
 1st a superior suitable increase in the depth of the
 layers of vegetable earth. 2nd removal of the earth. 3rd
 pulverizing, 4th a fine and moisture, 5th exposure to the
 atmosphere, and 6th destruction of all weeds and
 harrowing. In my opinion there is no work in the fall
 that is more carefully and thoroughly done than harrow-
 ing it should be carefully and thoroughly done, so
 as to pulverize the ground well, a jointed harrow, I
 think, best, and if the harrow is not sufficient then the
 roller should be used.

Time for harvesting - Rusted wheat should be cut

as soon as the rust strikes, for cutting destroys the rust plant, leaving the sap and nutritious elements still in the stem, which is communicated to the grain. From ten days to two weeks before ripe, the stem of the wheat plant will be found turning yellow at the ground, indicating that the roots have ceased to supply the plant with sap - hence whatever sap or nutritious elements necessary to fill out the grain, are in the stem and leaves. That the rust plant appropriates to itself while the wheat remains uncut. Every farmer has observed that when corn is cut up when the grain is green, in a few days the corn will be shrivelled and loose on the cob, but in two or three weeks, when the stalk is pretty well dried the grain is full and tight on the cob. This arises from the continued course of the sap to the cob, and from it to the grain. If this is the case with the corn, why the action of the roots continues until the grain is ripe; how much more likely is it to be the case with the wheat, where the roots cease their action before the maturity of the grain. Wheat should be cut before it comes to full maturity - otherwise it assumes a dusky appearance and does not yield such white flour. There are three stages of maturity, with dough and ripe. The state of straw in these cases, 1st green - 2 yellow - at the ground but all other parts green. 3rd all yellow. From experiments tried in England, wheat cut in all of these stages, the yield of flour and bran was as follows: No 1 Cut in the milk 75 lbs flour 7" short 16" bran No 2 Cut in the dough 80" " " " 12 " " 3 Cut when fully ripe 72" flour 11" short 15" bran. So it appears from this, that corn that cut when perfectly ~~ripe~~ green yielded more flour than that cut when fully ripe, but that cut when in the dough or when the straw had only turned yellow at the roots, yielded the most flour. In conclusion, would say that if farmers would cultivate less ground in wheat, use more potatoes.

slowly and better, pulverize thoroughly, put
the seed in with the drill and at the proper season,
but when in the tough, bind and short soil,
they will find the cultivation of the wheat plant
a pleasant and profitable pursuit.

J. Jackson The subject under consideration
this evening. being one of so much importance
to the farmer, and one in which we are all
more or less interested in, whether we are farmers
or not. It has been a matter of surprise to me that
it has not been brought up for discussion before
this club until this evening. It is said some
farmers among us whose notions in reference to
wheat culture are about the same as to say things
else pertaining to agriculture; they go on the
principle that if their land is naturally adapted
to wheat it is not necessary to spend much time
or labor in preparing the ground; it will yield
an abundant crop at any rate, if the soil is
not naturally good for wheat there is no use
in trying to raise much to the acre, it will be
a small crop at any rate, 'so they put forth but
a feeble effort in either case.' The wheat crop in
the state of Ohio for the last 15 years has averaged
about 12 bushel per acre, at this rate it will hardly
pay to raise for commercial purposes, the cost of
seed, of labor in preparing the soil, putting in the
crop, harvesting, threshing, and hauling to market
exceeds the value of the crop. Is it possible then
at an expense within the means of ordinary
farmers, to double the product per acre of the
crop. If nature has not limit to the amount
that can be raised to the acre and if our
fathers have come up to that limit, there is
no use in trying to do any better. But if the
crop is only half what the soil is capable of
producing, the farmer should be encouraged
to reason out for a better mode of cultivation.

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 coat. I shivered as I
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 The air was thick with
 the smell of coal and
 the sound of the train
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 I looked up at the
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